












































# WHO International Biological Reference Preparations













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

PREPARATION	STANDARD	MATERIAL	HELD AT	CODE	WHO/BS DOCUMENT	
 Acellular pertussis vaccine for potency assay by modified mouse challenge test, Lyophilized, 34 IU / ampoule	1st International Standard, 2008	Vaccine	NIBSC	JNIH-3	08.2086	
 Activin A, human, recombinant, Lyophilized, 5 units / ampoule.	1st Reference Reagent, 1998	Recombinant hormone	NIBSC	91/626	98.1882	
 Alpha-1-antitrypsin, Lyophilized, 243 nmoles / ampoule for total protein and antigen equivalent to 12.4 mg for plasma derived products.	1st International Standard, 2006	Human plasma	NIBSC	05/162	06.2044	
 Alpha-1-antitrypsin, extended use, Lyophilized, Total protein and antigenic value of 12.4 mg. Potency of 243 nmoles for recombinant AAT.	1st International Standard, 2008	Human plasma	NIBSC	05/162	08.2092	
 Alphafoetoprotein, Lyophilized, 100,000 IU / ampoule.	1st International Standard, 1975	Human cord serum	NIBSC	AFP	75.1121	
 Amphotericin B, Lyophilized, 944 IU / mg. Approximately 100 mg of Amphotericin B.	2nd International Standard, 2007	Antibiotic	EDQM	ISA_29078	07.2073	
 Ancrod, Lyophilized, 55 IU/ampoule	1st International Reference Preparation, 1976	Enzyme	NIBSC	74/581	76.1130	
 Anthrax spore vaccine, Lyophilized spore suspension of Bacillus anthracis strain 34 F2., 1 IU / ampoule.	1st International Reference Preparation, 1978	Antigen	NIBSC	AxV2	78.1198	
 Anti-A and anti-B antibodies in intravenous immunoglobulin: Limit reference preparation, Lyophilized, Anti-A and anti-B titres in the 2-fold range 32-64 using direct haemagglutination of A1 and B red cells.	1st Reference Reagent, 2008	Human immunoglobulin	NIBSC	07/310	08.2091	
 Anti-A and anti-B antibodies in intravenous immunoglobulin: Positive control and negative control for haemagglutination tests, Lyophilized., The guide titres for anti-A and anti-B in the Positive Control preparation 07/306 are in the 2-fold ranges of 32-64 and 16-32, respectively. 07/308 is the Negative Control in the same assays.	1st Reference Reagent, 2008	Human immunoglobulin	NIBSC	07/306 & 07/308	08.2091	
 Anti-A blood grouping minimum potency reagent, Lyophilized, A 1 in 8 dilution defines the recommended minimum potency specification for anti-A blood grouping reagents.	1st International Standard, 2005	Monoclonal IgM (murine)	NIBSC	03/188	06.2053	
 Anti-B blood grouping minimum potency reagent, Lyophilized, A 1 in 4 dilution defines the recommended minimum potency specification for anti-B blood grouping reagents.	1st International Standard, 2005	Monoclonal IgM (murine)	NIBSC	03/164	05.2024	
 Anti-brucella abortus serum, bovine, Lyophilized, 1,000 IU / ampoule of agglutinating; 1,000 IU / ampoule of complement-fixing activity.	2nd International Standard, 1975	Ovine serum	NIBSC	BaDS	75.1124	
 Anti-brucella ovis serum, ovine, Lyophilized, 1,000 IU / ampoule.	1st International Standard, 1985	Ovine serum	NIBSC	BovisDs	85.1485	
 Anti-C complete blood typing serum, Lyophilized, 100 IU/ampoule	1st International Standard, 1984	Human serum	NIBSC	W1004	84.1424	
 Anti-c incomplete blood typing serum, Lyophilized, 64 IU/ampoule	1st International Standard, 1976	Human serum	NIBSC	W1007	71.1038	
 Anti-canine distemper serum, Lyophilized, 1,000 IU / ampoule.	1st International Standard, 1967	Horse serum	NIBSC	CDS	67.881	
 Anti-canine hepatitis serum, Lyophilized, 1,000 IU / ampoule.	1st International Standard, 1967	Horse serum	NIBSC	CHS	67.880	

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Anti-D (anti-Rho) minimum potency reagent, complete, Lyophilized, A 1 in 3 dilution defines the recommended minimum potency specification for low protein anti-D blood reagents; a 1 in 8 dilution defines the recommended minimum potency specification for high protein anti-D reagents.	1st International Standard, 2004	Monoclonal IgM (human)	NIBSC	99/836	04.2000 Rev. 1	
Anti-D antibodies in intravenous immunoglobulin: Positive control and negative control for haemagglutination tests, Lyophilized., The guide titre for anti-D in the Positive Control preparation 02/228 is 8; 02/226 is the Negative Control in the same assay using direct haemagglutination of A1 and B red cells.	1st Reference Reagent, 2004	Human immunoglobulin	NIBSC	02/228 & 02/226	04.2002	
Anti-D immunoglobulin, Lyophilized, 285 IU (57 µg)/ampoule	2nd International Standard, 2003	Human immunoglobulin	NIBSC	01/572	03.1962	
Anti-dengue virus type 1,2,3 and 4 serum, Freeze-dried, 100 units per serotype per ampoule.	1st Reference Reagent, 2005	Human plasma	NIBSC	02/186	05.2009	
Anti-dysentery serum (Shiga), equine, , 1 IU equivalent to 0.05 mg of dried standard serum.	1st International Standard, 1928	Horse serum	NIBSC	DY	Bull. Health Org. 4, 1935	
Anti-E complete blood-typing serum, human, Lyophilized, 100 IU/ampoule.	1st International Standard, 1983	Human serum	NIBSC	W1005	83.1424	
Anti-echinococcus serum, Lyophilized, 87.36 mg human serum/ampoule.	1st International Reference Reagent, 1975	Human serum	NIBSC	ECHS	75.1106	
Anti-hepatitis A immunoglobulin, Lyophilized, 49 IU/ampoule	2nd International Standard, 1998	Human immunoglobulin	NIBSC	W1041 97/646	98.1878	
Anti-hepatitis B immunoglobulin, Lyophilized, 100 IU/ampoule	2nd International Standard, 2008	Human immunoglobulin	NIBSC	07/164	08.2084	
Anti-hepatitis B virus core antibodies (anti-HBc), Lyophilized, 50 IU/vial	1st International Standard, 2008	Human plasma	NIBSC	95/522	08.2098	
Anti-hepatitis E serum, Lyophilized, 50 units/ampoule	1st Reference Reagent, 1997	Human serum	NIBSC	95/584	97.1869	
Anti-HIV antibodies (HIV-1 subtypes A, B, C, CRF01_1AE, group O and HIV-2), Lyophilized, No unitage assigned.	1st International Reference Panel, 2006	Human plasma	NIBSC	02/210	06.2032	
Anti-human neutrophil antigen-1a, Lyophilized, Minimum potency with 1 in 4 dilution	1st International Reference Reagent, 2011	Human plasma	NIBSC	09/284	2011.2167	
Anti-human platelet antigen 1 a (HPA-1 a), Lyophilized, 100 IU/ampoule	1st International Standard, 2005	Human plasma	NIBSC	03/152	05.2011	
Anti-human platelet antigen 1 a (HPA-1 a) antibodies, Lyophilized, Minimum potency with 1 in 2 dilution	1st Reference Reagent, 2007	Human plasma	NIBSC	05/106	07.2079	
Anti-human platelet antigen 3a (HPA-3a), Lyophilized, Minimum potency with 1 in 8 dilution	1st Reference Reagent, 2006	Human plasma	NIBSC	03/190	06.2033	
Anti-human platelet antigen-5b (anti-HPA-5b), Lyophilized, Minimum potency with 1 in 2 dilution	1st Reference Reagent, 2003	Human plasma	NIBSC	99/566	01.1945	
Anti-interferon alpha serum, Lyophilized, 8,000 neutralising units/ampoule.	1st International Reference Reagent, 1994	Human serum	NIAID	G037-501-572	94.1783	




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Anti-interferon beta serum, Lyophilized, 1,500 neutralising units/ampoule	1st International Reference Reagent, 1994	Human serum	NIAID	G038-501-572	94.1783	
Anti-measles serum, Lyophilized, 3 IU/ampoule	3rd International Standard, 2006	Human serum	NIBSC	97/648	07.2076, 06.2031	
Anti-mycoplasma gallisepticum serum, Lyophilized, 1,000 IU / ampoule of agglutinating activity and 1,000 IU / ampoule of haemagglutination-inhibiting activity.	1st International Reference Preparation, 1969	Chicken serum	NIBSC	MgDS	69.961	
Anti-newcastle-disease serum, Lyophilized, 320 IU / ampoule.	1st International Reference Preparation, 1968	Chicken serum	NIBSC	NDS	67.878	
Anti-nuclear ribonucleoprotein serum, Lyophilized, No unitage assigned.	1st International Reference Reagent, 1983	Human serum	NIBSC	W1063	83.1390	
Anti-nuclear-factor (homogeneous) serum, Lyophilized, 100 IU/ampoule	1st International Reference Preparation, 1970	Human serum	NIBSC	66/233 (W1064)	70.1005	
Anti-parvovirus B19 (IgG) serum, Lyophilized, 77 IU/ampoule	2nd International Standard, 2003	Human serum	NIBSC	01/602	03.1960	
Anti-pertussis serum, mouse, Lyophilized, 17 units / vial of anti-pertussis toxin. 143 units / vial of anti-filamentous haemagglutinin. 30 units / vial of anti-pertactin. 32 units / vial of anti-fimbria types 2/3.	1st Reference Reagent, 1999	Mouse serum	NIBSC	97/642	99.1901	
Anti-poliovirus serum (Types 1, 2, 3), Lyophilized, 11 IU/ampoule (Type 1), 32 IU/ampoule (Type 2), 3 IU/ampoule (Type 3)	3rd International Standard, 2006	Human serum	NIBSC	82/585	06.2038	
Anti-Q-fever serum, bovine, Lyophilized, 1,000 IU / ampoule.	1st International Standard, 1954	Bovine serum	NIBSC	QF	53.230	
Anti-rabies immunoglobulin, Lyophilized, 30 IU/ampoule	2nd International Standard, 1993	Human immunoglobulin	NIBSC	RAI	93.1749	
Anti-rubella immunoglobulin, Lyophilized, 1,600 IU/vial	1st International Standard, 1996	Human immunoglobulin	NIBSC	RUBI-1-94	96.1833	
Anti-salmonella pullorum serum (Standard Form S), Lyophilized, 1,000 IU/ampoule	1st International Standard, 1973	Goat serum	NIBSC	SpDS-S2	73.1066	
Anti-salmonella pullorum serum (Variant Form V), Lyophilized, 1,000 IU / ampoule.	1st International Standard, 1973	Goat serum	NIBSC	SpDS-V	73.1066	
Anti-smooth muscle serum, Lyophilized, No unitage assigned.	1st International Reference Reagent, 1983	Human serum	NIBSC	W1062	83.1390	
Anti-staphylococcal P-V leucocidin serum, equine, Lyophilized, 150 IU / ampoule.	1st International Standard, 1965	Horse serum	NIBSC	SPLS	65.769	
Anti-swine fever serum, Lyophilized, 1,000 IU / ampoule.	1st International Standard, 1963	Pig serum	NIBSC	SFS	62.573	
Anti-syphilitic plasma IgG, Lyophilized, 0.3 IU per ampoule relative to 05/132 the 1st IS for human syphilitic plasma IgG and IgM.	2nd International Standard, 2007	Human plasma	NIBSC	05/122	07.2059	
Anti-syphilitic plasma IgG and IgM, Lyophilized, 3 IU/ampoule	1st International Standard, 2007	Human plasma	NIBSC	05/132	07.2059	
Anti-tetanus immunoglobulin, Lyophilized, 120 IU/ampoule.	1st International Standard, 1992	Human immunoglobulin	NIBSC	TE-3	92.1696	

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Antithrombin, Lyophilized, Functional potency - 0.95 IU/ampoule, Antigenic potency - 0.96 IU/ampoule	3rd International Standard, 2010	Human plasma	NIBSC	08/258	10.2146	
Antithrombin, concentrate, Lyophilized, Functional potency - 4.4 IU/ampoule. Antigenic potency - 4.5 IU/ampoule.	3rd International Standard, 2007	Purified plasma protein	NIBSC	06/166	07.2069	
Anti-thyroglobulin serum, Lyophilized, 1,000 IU/ampoule	1st International Reference Preparation, 1978	Human serum	NIBSC	65/093	78.1188	
Anti-tick borne encephalitis serum (louping ill (Moredun) virus), Lyophilized, No unitage assigned.	1st International Reference Reagent, 1964	Sheep serum	NIBSC	TILI	64.707	
Anti-tick borne encephalitis serum (Russian spring-summer (sophyn and absettarov virus), Lyophilized, No unitage assigned.	1st International Reference Reagent, 1964	Sheep serum	NIBSC	TISA	64.707	
Anti-toxoplasma serum, Lyophilized, 1,000 IU/ampoule.	3rd International Standard, 1994	Human serum	NIBSC	TOXM	94.1761	
Anti-toxoplasma serum (IgG), Lyophilized, 20 IU / ampoule.	1st International Standard, 2003	Human serum	NIBSC	01/600	03.1971	
Anti-Trypanosoma cruzi I antibody (TcI), Lyophilized, 1 IU/ml	1st International Standard, 2011	Human plasma	NIBSC	09/186	2011.2181	
Anti-Trypanozoma cruzi II antibody (TcII), Lyophilized, 1 IU/ml	1st International Standard, 2011	Human plasma	NIBSC	09/188	2011.2181	
Anti-varicella zoster immunoglobulin, Lyophilized, 50 IU/ampoule	1st International Standard, 1987	Human immunoglobulin	NIBSC	W1044	87.1565	
Anti-yellow fever serum, monkey, Lyophilized, 143 IU / ampoule.	1st International Standard, 1962	Monkey serum	NIBSC	YF	62.545	
Apolipoprotein A-1, Lyophilized, 1.5 mg/vial.	1st International Reference Reagent, 1992	Human serum	CDC	SP1-01	92.1706	
Apolipoprotein B, Frozen, 1.22 mg/vial.	1st International Reference Reagent, 1993	Human serum	CDC	SP3-07	93.1721	
Arginine vasopressin, Lyophilized, 8.2 IU / ampoule.	1st International Standard, 1978	Hormone	NIBSC	77/501	78.1231	
Atrial natriuretic factor, human, Lyophilized, 2.5 IU / ampoule.	1st International Standard, 1987	Peptide hormone	NIBSC	85/669	87.1578	
Bacitracin, Lyophilized, Approximately 100 mg of zinc bacitracin (74 IU / mg).	2nd International Standard, 1964	Antibiotic	EDQM	62/003	64.681	
Basic fibroblast growth factor (bFGF, FGF-2), human, rDNA derived, Lyophilized, 1,600 IU / ampoule.	1st International Standard, 1993	Recombinant growth factor	NIBSC	90/712	93.1736	
BCG vaccine, Lyophilized, 2.5 mg of semi-dry bacillary mass / 5-ml ampoule.	1st International Reference Preparation, 1965	Antigen	NIBSC	BCG	65.802	
BCG, Danish 1331 sub-strain for viability, identity and in vivo assays, Lyophilized,	1st Reference Reagent, 2009	Bacteria	NIBSC	07/270	09.2114	
BCG, Russian BCG-I sub-strain for viability, identity and in vivo assays, Lyophilized,	1st Reference Reagent, 2010	Bacteria	NIBSC	07/274	10.2148, 09.2114	
BCG, Tokyo 172 sub-strain for viability, identity and in vivo assays, Lyophilized,	1st Reference Reagent, 2009	Bacteria	NIBSC	07/272	09.2114	
BCR-ABL translocation, four panel members Lyophilized 10%, 1%, 0.1% & 0.01%, ,	1st Reference Panel, 2009	Freeze-dried cells	NIBSC	09/138	09.2106	

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Beta-2 microglobulin, Lyophilized, 100 IU / ampoule.	1st International Standard, 1985	Human serum	NIBSC	B2M	85.1501	
Beta-thromboglobulin, Lyophilized, 500 IU/ampoule.	1st International Standard, 1984	Purified plasma protein	NIBSC	83/501	84.1455	
Birch pollen extract (Betula verrucosa), Lyophilized, 100,000 IU / ampoule.	1st International Standard, 1986	Allergen	NIBSC	84/522	86.1512	
Bleomycin complex A2/B2, Lyophilized, 8,910 IU / ampoule.	1st International Reference Preparation, 1980	Antibiotic	EDQM	78/547	80.1276	
Blood coagulation factor IX concentrate, Lyophilized, 7.9 IU/vial.	4th International Standard, 2008	Purified plasma protein	NIBSC	07/182	08.2097	
Blood coagulation factor IXa, concentrate, Lyophilized, 11.0 IU/ampoule.	1st International Standard, 1999	Recombinant protein	NIBSC	97/562	99.1916	
Blood coagulation factor V, Lyophilized, 0.74 IU of Factor V:C per ampoule	1st International Standard, 2005	Human plasma	NIBSC	03/116	05.2007	
Blood coagulation factor V Leiden (G1691A), human gDNA (three samples: FV wild type; FVL homozygote; FVL heterozygote), Lyophilized, No assigned value	1st International Reference Panel, 2004	Genetic material	NIBSC	04/224	04.1997	
Blood coagulation factor VII, concentrate, Lyophilized, Chromogenic method: 9.8 IU/ampoule; Clotting method: 10.6 IU/ampoule	2nd International Standard, 2012	Purified plasma protein	NIBSC	10/252	2012.2204	
Blood coagulation factor VIIa concentrate, human, Lyophilized, 656 IU / ampoule.	2nd International Standard, 2008	Recombinant protein	NIBSC	07/228	08.2090	
Blood coagulation factor VIII and von Willebrand factor, Lyophilized, Factor VIII: C 0.68 IU/ amp; Factor VIII:Antigen 1.04 IU/ amp; VWF:Antigen 1.00 IU/ amp; VWF:Ristocetin cofactor 0.87 IU/amp; VWF:Collagen binding 1.03 IU/amp; VWFpp 1.03 IU/amp	6th International Standard, 2009 / VWFpp 2011	Human plasma	NIBSC	07/316	09.2116; 2011.2171	
Blood coagulation factor VIII, concentrate, Lyophilized., 9.4 IU/ampoule	8th International Standard, 2009	Purified plasma protein	NIBSC	07/350	09.2117	
Blood coagulation factor XI, Lyophilized, 0.86 IU/ampoule	1st International Standard, 2005	Human plasma	NIBSC	04/102	05.2017	
Blood coagulation factor XI activated (FXIa), Lyophilized, 10 units/ampoule.	1st International Reference Reagent, 2012	Human plasma	NIBSC	11/236	2012.2206	
Blood coagulation factor XIII, Lyophilized, Activity 0.91 IU/ampoule; Antigen 0.93 IU/ampoule	1st International Standard, 2004	Human plasma	NIBSC	02/206	04.1994 Rev.1	
Blood coagulation factors II and X, concentrate, Lyophilized, FII: 9.4 IU/ampoule, FX: 8.1 IU/ampoule	4th International Standard, 2012	Purified plasma proteins	NIBSC	11/126	2012.2210	
Blood coagulation factors II, VII, IX, X, Lyophilized, 0.89 IU (factor II), 0.99 IU (factor VII), 0.86 IU (factor IX), 0.89 IU (factor X) / ampoule.	4th International Standard, 2010	Human plasma	NIBSC	09/172	10.2145	
Bone morphogenic protein-2, human, rDNA derived, Lyophilized, 5,000 units / ampoule.	1st Reference Reagent, 1997	Recombinant cytokine	NIBSC	93/574	97.1857	
Bordetella pertussis fimbrial antigen type 2 (monoclonal antibody for serotyping). Lyophilized. No assigned values, ,	1st International Standard, 2009	Cell culture suspension	NIBSC	06/124	09.2120	

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 Bordetella pertussis fimbrial antigen type 3 (monoclonal antibody for serotyping). Lyophilized. No assigned values, ,	1st International Standard, 2009	cell culture suspension	NIBSC	06/128	09.2120	
 Brain derived neurotrophic factor, human, rDNA derived, Lyophilized, 16,000 units / ampoule.	1st Reference Reagent, 1997	Recombinant growth factor	NIBSC	96/534	97.1867	
 C1 esterase inhibitor, Lyophilized, 0.89 IU/ampoule	1st International Standard, 2010	Human plasma	NIBSC	08/262	10.2144	
 C1 esterase inhibitor, concentrate, Lyophilized, 9.6 IU/ampoule	1st International Standard, 2010	Purified plasma protein	NIBSC	08/256	10.2144	
 Calcitonin, eel, Lyophilized, 88 IU / ampoule.	1st International Standard, 1989	Hormone	NIBSC	88/556	89.1620	
 Calcitonin, human, Lyophilized, 17.5 IU / ampoule.	2nd International Standard, 1991	Hormone	NIBSC	89/620	91.1675	
 Calcitonin, salmon, Lyophilized, 138 IU / ampoule.	3rd International Standard, 1999	Hormone	NIBSC	98/586	99.1906	
 Carcinoembryonic antigen (CEA), Lyophilized, 100 IU/ampoule	1st International Reference Preparation, 1975	Human carcinoma derived	NIBSC	73/601	75.1110	
 Cholera antitoxin, goat, Lyophilized, 2,200 IU / ampoule.	1st International Standard, 1984	Goat serum	NIBSC	CHAN	84.1438	
 Cholera vaccine (Inaba), Lyophilized, 40,000,000,000 organisms / ampoule.	2nd International Reference Preparation, 1971	Antigen	NIBSC	INV	71.1032 Rev. 1	
 Cholera vaccine (Ogawa), Lyophilized, 40,000,000,000 organisms / ampoule.	2nd International Reference Preparation, 1971	Antigen	NIBSC	OGV	71.965	
 Chorionic gonadotrophin, alpha subunit, human, for immunoassay, Lyophilized, 70 IU / ampoule.	1st International Reference Preparation, 1974	Glycoprotein hormone	NIBSC	75/569	74.1094	
 Chorionic gonadotrophin, beta subunit, human, for immunoassay, Lyophilized, 70 IU / ampoule.	1st International Reference Preparation, 1974	Glycoprotein hormone	NIBSC	75/551	74.1094	
 Chorionic gonadotrophin, human, Lyophilized, 650 IU / ampoule.	4th International Standard, 1999	Glycoprotein hormone	NIBSC	75/589	99.1905	
 Chorionic gonadotrophin, Lyophilized 179 International Units or 0.39 nmol per ampoule for calibration of immunossays, and 162 International Units per ampoule for calibration of bioassay, ,	5th International Standard, 2009	Native hormone purified from urine	NIBSC	07/364	09.2107	
 Ciliary Neurotrophic Factor for the bioassay of human CNTF, human, rDNA derived, Lyophilized, For bioassay: 8,000 units / ampoule; for immunoassay: 6.5 µg / ampoule.	1st Reference Reagent, 2001	Recombinant growth factor	NIBSC	94/684	01.1943	
 Clostridium botulinum type B antitoxin, equine, Lyophilized, 30.7 IU / ampoule.	2nd International Standard, 1985	Horse serum	NIBSC	BUSB	85.1469	
 Clostridium botulinum type D antitoxin, equine, Lyophilized, 1,000 IU / ampoule.	1st International Standard, 1962	Horse serum	NIBSC	61/001 (BUSD)	62.582	
 Clostridium novyi alpha toxoid, Lyophilized, No unitage assigned.	1st International Reference Preparation, 1966	Toxoid	NIBSC	CoT	70.1022	
 Clostridium perfringens beta antitoxin, equine, Lyophilized, 4,770 IU / ampoule.	2nd International Standard, 1998	Horse serum	NIBSC	2Cp BetaAt	85.1484	






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 Clostridium perfringens beta toxoid, Lyophilized, No unitage assigned.	1st International Reference Preparation, 1975	Toxoid	NIBSC	CWBetatd	75.1122
 Clostridium perfringens epsilon antitoxin, equine, Lyophilized, 1,020 IU / ampoule.	2nd International Standard, 1985	Horse serum	NIBSC	2Cp Epsilon At	85.1484
 Clostridium perfringens epsilon toxoid, Lyophilized, No unitage assigned.	1st International Reference Preparation, 1975	Antigen	NIBSC	CW Epsilontd	75.1122
 Colistin, Lyophilized, 20,500 IU / mg. Approximately 75 mg of colistin sulfate.	1st International Standard, 1968	Antibiotic	EDQM	65/062	68.923
 Colistin methane sulfonate, Lyophilized, 12,700 IU / mg. Approximately 75 mg of colistin methane sulfonate.	1st International Reference Preparation, 1968	Antibiotic	EDQM	66/254	68.924
 Corticotrophin (ACTH), porcine, Lyophilized, 5 IU / ampoule.	3rd International Standard, 1962	Pituitary hormone	NIBSC	59/016	62.548
 C-reactive protein, Lyophilized, 0.049 IU/ampoule	1st International Standard, 1986	Human plasma	NIBSC	85/506	86.1514
 Dihydrostreptomycin, Lyophilized, 19,425 IU/vial.	3rd International Standard, 2011	Antibiotic	EDQM	ISA_42688	2011.2176 
 Diphtheria (schick) test toxin, Lyophilized, 900 IU / ampoule.	1st International Standard, 1954	Toxin	NIBSC	STT	54.274
 Diphtheria antitoxin, equine, Lyophilized, 10 IU / ml. Bottles in the form of 10 ml of a solution of dried serum in 66% v/v of glycerol.	1st International Standard, 1934	Horse serum	NIBSC	07/200	Quart. Bull. Health Organ. 4, 1935
 Diphtheria toxoid, absorbed, Lyophilized, 160 IU / ampoule.	3rd International Standard, 1999	Adsorbed toxoid	NIBSC	98/560	99.1915
 Diphtheria Toxoid, absorbed, Lyophilized, 213 IU/ampoule	4th International Standard, 2009	Toxoid	NIBSC	07/216	09.2123 
 Diphtheria toxoid, for flocculation tests, Lyophilized, 1100 Lf IU / ampoule.	2nd International Standard, 2007	Toxoid	NIBSC	02/176 (DIFT)	07.2062 
 Dog hair and dander extract (Canis domesticus), Lyophilized, 100,000 IU / ampoule.	1st International Standard, 1986	Allergen	NIBSC	84/685	86.1513
 Elcatonin (Calcitonin analogue), Lyophilized, 15 IU / ampoule.	1st International Standard, 1986	Endocrinological products	NIBSC	84/614	85.1494
 Endotoxin for Limulus Amoebocyte Lysate (LAL) gelation tests, Lyophilized, 10,000 IU / ampoule.	2nd International Standard, 1996	Toxin	NIBSC	94/580	96.1830 Rev. 1
 Epidermal growth factor (1-52), human, recombinant, Lyophilized, 1.75 µg / ampoule. No unitage assigned.	1st International Reference Reagent, 1994	Recombinant growth factor	NIBSC	91/550	94.1781
 Epidermal growth factor, human, recombinant, Lyophilized, 2,000 IU / ampoule.	1st International Standard, 1994	Recombinant growth factor	NIBSC	91/530	94.1781
 Epstein Barr virus DNA, Lyophilized, 5,000,000 IU/ml	1st International Standard, 2011	B95-8 strain formulated in universal buffer	NIBSC	09/260	2011.2172 
 Erythromycin, Lyophilized, 920 IU / mg. Approximately 75 mg of erythromycin A base.	2nd International Standard, 1978	Antibiotic	EDQM	76/538	78.1228
 Erythropoietin, human, urinary, Lyophilized, 10 IU / ampoule.	2nd International Reference Preparation, 1970	Urinary hormone	NIBSC	67/343	70.1015

















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Erythropoietin, rDNA-derived, Lyophilized, 120 IU / ampoule.	2nd International Standard, 2003	Recombinant hormone	NIBSC	88/574	03.1963	
Ferritin, recombinant, Lyophilized, 6.3 µg/ampoule	3rd International Standard, 1996	Recombinant protein diluted in plasma	NIBSC	94/572	96.1838	
Fibrinogen, Lyophilized, 2.7 mg/ampoule	3rd International Standard, 2011	Human plasma	NIBSC	09/264	2011.2168	
Fibrinogen concentrate, Lyophilized, Clottable protein: 10.8 mg/ampoule; Total protein: 15.0 mg/ampoule	2nd International Standard, 2012	Purified plasma protein	NIBSC	09/242	2012.2208	
FMS-like tyrosine kinase 3 ligand, human, rDNA derived, Lyophilized, 1,000 units / ampoule.	1st Reference Reagent, 1997	Recombinant cytokine	NIBSC	96/532	97.1858	
Folate in whole blood, Lyophilized, 13 ng/ampoule	1st International Standard, 1996	Hemolysed blood	NIBSC	95/528	95.1806	
Follicle stimulating hormone, human, recombinant, for bioassay, Lyophilized, 126 IU / ampoule.	2nd International Standard, 2010	Recombinant hormone	NIBSC	08/282	10.2140	
Follicle stimulating hormone, human, pituitary, Lyophilized, 80 IU / ampoule.	1st International Standard, 1986	Pituitary hormone	NIBSC	83/575	86.1535	
Follicle stimulating hormone, human, recombinant for immunoassay, Lyophilized, 60 IU / ampoule.	1st International Standard, 1997	Recombinant hormone	NIBSC	92/510	97.1871	
Follicle stimulating hormone, human, urinary (Urofollitropin), for bioassay, Lyophilized, 121 IU / ampoule.	1st International Standard, 1995	Urinary hormone	NIBSC	92/512	95.1819	
Follicle-stimulating hormone and luteinising hormone human, urinary for bioassay, Lyophilized, FSH 72 IU / ampoule. LH 70 IU / ampoule.	4th International Standard, 2000	Urinary hormone	NIBSC	98/704	00.1926	
Gas-gangrene antitoxin (Clostridium histolyticum), equine, Lyophilized, 50 IU / ampoule.	3rd International Standard, 1971	Horse serum	NIBSC	HI	71.1034	
Gas-gangrene antitoxin (Clostridium perfringens), equine, Lyophilized, 270 IU / ampoule.	5th International Standard, 1962	Horse serum	NIBSC	PE	62.547 Rev. 1	
Gas-gangrene antitoxin, (Clostridium novyi), equine, Lyophilized, 1,100 IU / ampoule.	3rd International Standard, 1966	Horse serum	NIBSC	OE	66.803	
Gas-gangrene antitoxin, (Clostridium septicum), equine, Lyophilized, 500 IU / ampoule.	3rd International Standard, 1957	Horse serum	NIBSC	VI	57.384	
Gentamicin, Lyophilized, 31,020 IU / ampoule.	2nd International Standard, 1995	Antibiotic	EDQM	92/670	95.1811	
Glucagon, porcine, Lyophilized, 1.49 IU / ampoule.	1st International Standard, 1973	Gastrointestinal peptide	NIBSC	69/194	73.1064	
Gonadotrophin, equine serum, Lyophilized, 1,600 IU / ampoule.	2nd International Standard, 1966	Horse serum	NIBSC	62/001	66.855	
Gramicidin, Lyophilized, 1,070 IU / mg. Approximately 100 mg of Gramicidin.	2nd International Standard, 2008	Antibiotic	EDQM	ISA_28168	08.2100	
Granulocyte colony stimulating factor, human, recombinant, Lyophilized, 10,000 IU / ampoule.	1st International Standard, 1992	Recombinant growth factor	NIBSC	88/502	92.1711	








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Granulocyte-macrophage colony stimulating factor, human, recombinant, Lyophilized, 1000ng / ampoule.	2nd International Standard, 2010	Recombinant growth factor	NIBSC	09/136	10.2133	
Haemoglobin A2, raised, Lyophilized, 5.3 % (w/w) of total haemoglobin.	1st International Reference Reagent, 1993	Beta-thalassemia haemolysate derived	NIBSC	89/666	93.1754	
Haemoglobin F, raised, Lyophilized, 3.4% (w/w) of total haemoglobin.	1st International Reference Reagent, 1993	Cyanmethaemoglobin, haemolysate derived	NIBSC	85/616	93.1755	
Haemoglobincyanide, Liquid, 49.79 µmol / l.	6th International Standard, 1998	Bovine hemoglobin	NIBSC	98/708	98.1886	
Haemophilia A, intron 22 inversion, human gDNA; four samples: normal male, normal female, female carrier, affected male, Lyophilized, No assigned activity.	1st International Reference Preparation, 2008	Genetic material	NIBSC	08/160	08.2093	
Haemophilus influenzae type b capsular polysaccharide, Lyophilized, 4.933 ± 0.267 mg/ampoule of polyribosyl ribitol phosphate (PRP).	1st International Standard, 2005	Antigen	NIBSC	02/208	05.2018	
Heparin, low molecular weight, Lyophilized, Anti-Xa: 1068 IU/ampoule, Anti-IIa: 342 IU/ampoule	3rd International Standard, 2012	Porcine mucosal derived	NIBSC	11/176	2012.2207	
Heparin, low molecular weight (calibrant for MW distribution), Lyophilized, No unitage. It is characterized by the final Broad Standard Table for 05/112.	2nd International Standard, 2007	Porcine mucosal heparin	NIBSC	05/112	07.2071	
Heparin, unfractionated, Lyophilized, 2,145 IU/ampoule	6th International Standard, 2009	Porcine mucosal derived	NIBSC	07/328	09.2124	
Hepatitis A vaccine, inactivated, Frozen, 100 IU / ml of immunogenic activity; 100 IU / ml of antigen content.	1st International Standard, 1999	Antigen	NIBSC	95/500	99.1914, 2011.2160	
Hepatitis A virus RNA, Lyophilized, 50,000 IU/vial.	1st International Standard, 2003	Human plasma	NIBSC	00/560	03.1959	
Hepatitis B surface antigen, subtype adw2, genotype A, Lyophilized, 33 IU/vial.	2nd International Standard, 2003	Human plasma	NIBSC	00/588	03.1987	
Hepatitis B surface antigen, subtype adw2, genotype A, Lyophilized, Dilutional panel (IU/vial: 8.25; 2.06; 0.52; 0.13).	1st International Reference Panel, 2003	Human plasma	NIBSC	03/262	03.1987	
Hepatitis B virus DNA, Lyophilized, 850,000 IU/vial (~5.93 log10 IU/ml)	3rd International Standard, 2011	Human plasma	NIBSC	10/264	2011.2170	
Hepatitis B virus DNA, Genotypes A, B, C, D, E, F, G, Lyophilized, No unitage assigned	1st International Reference Panel, 2009	Human plasma	PEI	5086/08	09.2121	
Hepatitis B virus genotype panel for HBsAg test (genotypes A - F and H), Lyophilized,	1st Reference Panel, 2011	Human plasma	NIBSC	XXX	2011.2180	
Hepatitis C virus RNA, Lyophilized, 260,000 IU/ml (~ 5.41 log10 IU/ml).	4th International Standard, 2011	Human plasma	NIBSC	06/102	2011.2173	
Hepatitis E virus RNA, Lyophilized, 250,000 IU/ml	1st International Standard, 2011	Human plasma	PEI	10/6329	2011.2175	
Hepatocyte growth factor/scatter factor (precursor), human, Lyophilized, 2,000 IU/ampoule	1st International Standard, 1999	Recombinant growth factor	NIBSC	96/556	99.1899	












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 Hepatocyte growth factor/scatter factor, human, Lyophilized, 4,000 IU / ampoule.	1st International Standard, 1999	Recombinant growth factor	NIBSC	96/564	99.1899	
 HIV-1 p24 antigen, Lyophilized, 1,000 IU/ampoule	1st International Reference Reagent, 1992	Peptide in human serum	NIBSC	90/636	92.1699	
 HIV-1 RNA, Lyophilized, 185,000 IU/ml (5.27 log <sub>10</sub> IU/ml)	3rd International Standard, 2011	HIV-1 genotype B isolate diluted in human plasma	NIBSC	10/152	2011.2178	
 HIV-1 RNA subtype reference panel (A, B, C, D, AE, F, G, AG-GH, groups N and O), Lyophilized, No unitage assigned	2nd International Reference Panel, 2012	Human plasma	NIBSC	Candidate HIV-1 NAT panel	2012.2209	
 HIV-2 RNA, Lyophilized, 1000 IU/vial	1st International Standard, 2009	Human plasma	NIBSC	08/150	09.2118 Rev.1	
 House-dust mite extract ( <i>Dermatophagoides pteronyssinus</i> ), Lyophilized, 10,000 IU / ampoule.	1st International Standard, 1983	Allergen	NIBSC	82/518	83.1417	
 Human brain, CJD control, Frozen, No assignment.	1st Reference Reagent, 2003	Brain homogenate	NIBSC	NHBZ0/000	03.1965 Rev.1	
 Human brain, sporadic CJD, preparation 1, Frozen, No assignment.	1st Reference Reagent, 2003	Brain homogenate	NIBSC	NHBX0/000 1	03.1965 Rev. 1	
 Human brain, sporadic CJD, preparation 2, Frozen, No assignment.	1st Reference Reagent, 2003	Brain homogenate	NIBSC	NHBX0/000 2	03.1965 Rev. 1	
 Human brain, variant CJD, Frozen, No assignment.	1st Reference Reagent, 2003	Brain homogenate	NIBSC	NHBY0/000 3	03.1965 Rev.1	
 Human Chorionic Gonadotrophin for immunoassay of intact hCG, Lyophilized, 1.88 nmol / ampoule.	1st Reference Reagent, 2001	Hormone. Intact hCG: purified to remove nicked forms, and free subunits	NIBSC	99/688	01.1944	
 Human Chorionic Gonadotrophin, for immunoassay of alpha subunit hCG (hCG-alpha), Lyophilized, 0.84 nmol / ampoule.	1st Reference Reagent, 2001	Hormone. Purified alpha subunit of hCG	NIBSC	99/720	01.1944	
 Human Chorionic Gonadotrophin, for immunoassay of beta core fragment hCG (hCG-beta-cf), Lyophilized, 1.02 nmol / ampoule.	1st Reference Reagent, 2001	Hormone. hCG beta core fragment: residues beta 6-40 disulphide bonded to beta 55-92	NIBSC	99/708	01.1944	
 Human Chorionic Gonadotrophin, for immunoassay of hCG beta subunit (hCG-beta), Lyophilized, 0.88 nmol/ampoule.	1st Reference Reagent, 2001	Hormone. Beta subunit of hCG, purified to remove intact dimeric hCG, alpha subunit and nicked beta subunit	NIBSC	99/650	01.1944	
 Human Chorionic Gonadotrophin, for immunoassay of nicked hCG (hCG-n), Lyophilized, 0.78 nmol/ampoule.	1st Reference Reagent, 2001	Hormone. Nicked hCG: partially degraded hCG, missing peptide bonds in the beta-40-50 region	NIBSC	99/642	01.1944	
 Human Chorionic Gonadotrophin, for immunoassay of nicked hCG beta subunit (hCG-beta-n), Lyophilized, 0.33 nmol/ampoule.	1st Reference Reagent, 2001	Hormone. Nicked hCG beta subunit: partially degraded beta subunit, missing peptide bonds in the beta 40-50 region	NIBSC	99/692	01.1944	
 Human cytomegalovirus DNA, Lyophilized, 5,000,000 IU/vial.	1st International Standard, 2010	Merlin strain	NIBSC	09/162	10.2138	

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Human growth hormone, pituitary, Lyophilized, 4.4 IU / ampoule.	1st International Standard, 1982	Pituitary hormone	NIBSC	80/505	82.1369	
Human papillomavirus type 16 DNA, Lyophilized, 5 x 10**6 IU / ampoule	1st International Standard, 2008	DNA	NIBSC	06/202	08.2081	
Human papillomavirus type 18 DNA, Lyophilized, 5 x 10**6 IU / ampoule	1st International Standard, 2008	DNA	NIBSC	06/206	08.2081	
Human papillomavirus virus type 16, antibodies, Lyophilized, 5 International Units per ampoule	1st International Standard, 2009	Human plasma	NIBSC	05/134	09.2113	
Human serum complement components C1q, C4, C5, factor B, and whole functional complement CH50, Lyophilized, C1q : 100 IU/ampoule, C4 : 100 IU/ampoule, Factor B : 100 IU/ampoule, Whole functional complement CH50 : 100 IU/ampoule.	1st International Reference Preparation, 1980	Human serum	NIBSC	W1032	80.1281	
Human serum immunoglobulin E, Lyophilized, 5,000 IU/ampoule	2nd International Reference Preparation, 1980	Human serum	NIBSC	75/502	79.1240	
Human serum immunoglobulins G, A, and M (IgG, IgA and IgM), Lyophilized, 100 IU IgG, 100 IU IgA and 100 IU IgM/ampoule.	1st International Reference Preparation, 1970	Human serum	NIBSC	67/086	70.1019	
Influenza H5N1 antibody (human), Lyophilized, 1,000 IU / ampoule	1st International Standard, 2008	Human serum	NIBSC	07/150	08/2085	
Influenza pandemic H1N1 virus antibody, Lyophilized, 1300 IU / ampoule	1st International Standard, 2010	Human serum	NIBSC	09/194	10.2137	
Inhibin A, human, recombinant, Lyophilized, 150,000 IU / ampoule.	1st International Standard, 1994	Recombinant hormone	NIBSC	91/624	94.1787	
Inhibin B, Lyophilized, Immunoassay calibration 12 ng / ampoule. Bioactivity: 12 units / ampoule.	1st Reference Reagent, 2000	Immunoaffinity purified human inhibin hormone	NIBSC	96/784	00.1930	
Inhibin, porcine, Lyophilized, 2,000 IU / ampoule.	1st International Standard, 1990	Purified porcine hormone	NIBSC	86/690	90.1648	
Insulin C-peptide, human, Lyophilized, 10 µg / ampoule.	1st International Reference Reagent, 1986	Synthetic C-peptide	NIBSC	84/510	86.1538	
Insulin, bovine, Hydrated crystals., 25.7 IU / mg. Approximately 50 mg / ampoule.	1st International Standard, 1986	Insulin crystals	NIBSC	83/511	86.1524	
Insulin, human, Hydrated crystals., 26 IU / mg. Approximately 50 mg / ampoule.	1st International Standard, 1986	Insulin crystals	NIBSC	83/500	86.1524	
Insulin, human, for immunoassay, Lyophilized, 3 IU / ampoule.	1st International Reference Preparation, 1974	Human insulin	NIBSC	66/304	74.1084	
Insulin, porcine, Hydrated crystals, 26 IU / mg. Approximately 50 mg / ampoule.	1st International Standard, 1986	Insulin crystals	NIBSC	83/515	86.1524	
Insulin-like growth factor I for bioassay, Lyophilized, 150 IU / ampoule.	1st International Standard, 1994	Recombinant growth factor	NIBSC	91/554	94.1770	
Insulin-like growth factor I for immunoassay, Lyophilized, 3.1 µg / ampoule.	1st Reference Reagent, 2000	Recombinant hormone	NIBSC	87/518	00.1933	
Insulin-like growth factor II, human, recombinant, Lyophilized, 5,000 units / ampoule.	1st Reference Reagent, 1999	Recombinant growth factor	NIBSC	96/538	99.1898	

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 Insulin-like Growth Factor-I (IGF-I), recombinant, human, for immunoassay, Lyophilized, 8.5 microgram / ampoule with uncertainty: 7.73-9.23 microgram / ampoule	1st International Standard, 2008	Growth factor	NIBSC	02/254	08.2095	
 Interferon alpha , human, leukocyte N3, Lyophilized, 60,000 IU / ampoule.	1st International Standard, 1999	Human cells leukocyte derived	NIBSC	95/574	99.1911	
 Interferon alpha 1/8, human, Lyophilized, 27,000 IU / ampoule.	1st International Standard, 1999	Recombinant cytokine	NIBSC	95/572	99.1911	
 Interferon alpha 2c, human, recombinant, Lyophilized, 40,000 IU / ampoule.	1st International Standard, 1999	Recombinant cytokine	NIBSC	95/580	99.1911	
 Interferon alpha consensus, human, recombinant, Lyophilized, 100,000 IU / ampoule.	1st International Standard, 1999	Recombinant cytokine	NIBSC	94/786	99.1911	
 Interferon alpha, human, leukocyte (HuIFN-a(Le)), Lyophilized, 11,000 IU / ampoule.	2nd International Standard, 1999	Human cells leukocyte derived	NIBSC	94/784	99.1911	
 Interferon alpha, human, lymphoblastoid N1 (HuIFN-alpha(Ly)), Lyophilized, 38,000 IU / ampoule.	2nd International Standard, 1999	Human cells lymphoblastoid derived	NIBSC	95/568	99.1911	
 Interferon alpha-1 (alpha-D), human, recombinant, (rHuIFN-alpha1(alphaD)), Lyophilized, 8,000 IU / ampoule.	1st International Standard, 1987	Recombinant cytokine	NIBSC	83/514	87.1552	
 Interferon alpha2a, human, recombinant (rHuIFN-alpha2 (alpha-A)), Lyophilized, 63,000 IU / ampoule.	2nd International Standard, 1999	Recombinant cytokine	NIBSC	95/650	99.1911	
 Interferon alpha2b, human, recombinant, (rHuIFN-alpha2 (alpha-2b)), Lyophilized, 70,000 IU / ampoule.	2nd International Standard, 1999	Recombinant cytokine	NIBSC	95/566	99.1911	
 Interferon beta ser-17, human, recombinant (rHuIFN-beta(ser17)), Lyophilized, 6,000 IU / ampoule.	1st International Reference Reagent, 1987	Recombinant cytokine	NIAID	Gxb02-901-535	87.1552	
 Interferon beta, human, fibroblast (HuIFN-beta), Lyophilized, 40,000 IU / ampoule.	3rd International Standard, 2003	Human cells fibroblast derived	NIBSC	00/572	03.1976	
 Interferon gamma, human, recombinant, Lyophilized, 80,000 IU / ampoule.	1st International Standard, 1994	Recombinant cytokine	NIAID	Gxg01-902-535	94.1782	
 Interferon omega, human, recombinant, , 20,000 IU / ampoule.	1st International Standard, 1999	Recombinant cytokine	NIBSC	94/754	99.1911	
 Interferon, chick, Lyophilized, 80 IU / ampoule.	1st International Reference Preparation, 1978	Chick embryo cytokine	NIBSC	67/018	78.1225	
 Interferon, murine, alpha (MuIFN-alpha), Lyophilized, 16,000 IU / ampoule.	2nd International Standard, 1987	Murine cytokine	NIAID	Ga02-901-511	87.1552	
 Interferon, murine, beta (MuIFN-beta), Lyophilized, 15,000 IU / ampoule.	2nd International Standard, 1987	Recombinant cytokine	NIAID	Gb02-902-511	87.1552	
 Interferon, murine, gamma (MuIFN-gamma), Lyophilized, 1,000 IU / ampoule.	1st International Reference Reagent, 1987	Recombinant cytokine	NIAID	Gg02-901-533	87.1552	
 Interferon, rabbit, Lyophilized, 10,000 IU / ampoule.	1st International Standard, 1978	Recombinant cytokine	NIAID	G019-902-528	78.1225	
 Interleukin-1 alpha, human, Lyophilized, 117,000 IU / ampoule.	1st International Standard, 1989	Recombinant cytokine	NIBSC	86/632	TRS 800, 1990	

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Interleukin-1 beta, human, Lyophilized, 100,000 IU / ampoule.	1st International Standard, 1989	Recombinant cytokine	NIBSC	86/680	TRS 800, 1990
Interleukin-10, human, Lyophilized, 5,000 units / ampoule.	1st Reference Reagent, 1997	Recombinant cytokine	NIBSC	93/722	97.1868
Interleukin-11, human, Lyophilized, 5,000 units / ampoule.	1st Reference Reagent, 1996	Recombinant cytokine	NIBSC	92/788	96.1849
Interleukin-12, human, Lyophilized, 10,000 units / ampoule.	1st Reference Reagent, 1996	Recombinant cytokine	NIBSC	95/544	96.1849
Interleukin-13, human, Lyophilized, 1,000 units / ampoule.	1st Reference Reagent, 1996	Recombinant cytokine	NIBSC	94/622	96.1849
Interleukin-15, human, Lyophilized, 1,000 units / ampoule.	1st Reference Reagent, 1996	Recombinant cytokine	NIBSC	95/554	96.1849
Interleukin-17, for bioassays, Lyophilized, 10,000 units/ampoule	1st Reference Reagent, 2006	Cytokine	NIBSC	01/420	06.2039 
Interleukin-18, for bioassays, Lyophilized, 10,000 units/ampoule	1st Reference Reagent, 2006	Cytokine	NIBSC	03/200	06/2040 
Interleukin-2, human, Lyophilized, 100 IU / ampoule.	1st International Standard, 1987	T-Cell line (Jurkat) derived	NIBSC	86/ 504	87.1559
Interleukin-3, human, Lyophilized, 1,700 IU / ampoule.	1st International Standard, 1994	Recombinant cytokine	NIBSC	91/510	94.1788
Interleukin-4, human, Lyophilized, 1,000 IU / ampoule.	1st International Standard, 1994	Recombinant cytokine	NIBSC	88/656	94.1788
Interleukin-5, human, Lyophilized, 5,000 units / ampoule.	1st Reference Reagent, 1996	Recombinant cytokine	NIBSC	90/586	96.1849
Interleukin-6, human, Lyophilized, 100,000 IU / ampoule.	1st International Standard, 1992	Recombinant cytokine	NIBSC	89/548	92.1713
Interleukin-7, human, Lyophilized, 100,000 units / ampoule.	1st Reference Reagent, 1996	Recombinant cytokine	NIBSC	90/530	96.1849
Interleukin-8, human, Lyophilized, 1,000 IU / ampoule.	1st International Standard, 1995	Recombinant cytokine	NIBSC	89/520	95.1820
Interleukin-9, human, Lyophilized, 1,000 units / ampoule.	1st Reference Reagent, 1996	Recombinant cytokine	NIBSC	91/678	96.1849
Islet cell antibodies, Lyophilized, 20 units/ampoule of islet cell antibodies; 100 units/ampoule of anti-GAD65; 100 units/ampoule of anti-IA-2.	1st Reference Reagent, 1999	Human serum	NIBSC	97/550	99.1896
Kanamycin, Lyophilized, 10,345 IU / ampoule.	1st International Standard, 1986	Antibiotic	EDQM	83/521	86.1515
Keratinocyte growth factor, human, Lyophilized, 4000 units of KGF per ampoule.	1st Reference Reagent, 2005	Recombinant growth factor	NIBSC	03/150	05.2027 
Keratinocyte growth factor, human (24-163), Lyophilized, 9000 units of KGF per ampoule.	1st Reference Reagent, 2005	Recombinant growth factor	NIBSC	03/148	05.2027 
Leptin, human, Lyophilized, 4,000 IU / ampoule.	1st International Standard, 1999	Recombinant/ E.Coli	NIBSC	97/594	99.1900
Leptin, mouse, Lyophilized, 4,000 IU / ampoule.	1st International Standard, 1999	Recombinant/ E.Coli	NIBSC	97/626	99.1900
Leukaemia inhibitory factor, human, Lyophilized, 10,000 units / ampoule.	1st Reference Reagent, 1996	Recombinant cytokine	NIBSC	93/562	96.1850
Lipoprotein (a), Lyophilized, 0.107 nanomoles/vial	1st Reference Reagent, 2003	Human serum	CDC	IFCC SRM 2B	03.1979 
Luteinizing hormone, bovine, for immunoassay, Lyophilized, 0.025 IU / ampoule.	1st International Standard, 1985	Pituitary hormone	NIBSC	98/566	85.1474




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Luteinizing hormone, human, pituitary, Lyophilized, 35 IU / ampoule.	2nd International Standard, 1988	Pituitary hormone	NIBSC	80/552	88.1604	
Luteinizing hormone, human, pituitary, alpha subunit, Lyophilized, 10 IU / ampoule.	1st International Standard, 1984	Pituitary hormone	NIBSC	78/554	84.1443	
Luteinizing hormone, human, pituitary, beta subunit, Lyophilized, 10 IU / ampoule.	1st International Standard, 1984	Pituitary hormone	NIBSC	78/556	84.1443	
Lysine vasopressin, Lyophilized, 7.7 IU / ampoule.	1st International Standard, 1978	Synthetic hormone	NIBSC	77/512	78.1230	
Macrophage colony stimulating factor, human (CSF-1), Lyophilized, 60,000 IU / ampoule.	1st International Standard, 1992	Recombinant growth factor	NIBSC	89/512	92.1712	
MAPREC analysis of Poliovirus type 1 (100% 480A/525C control), Liquid frozen 82.5% 480A,525C/vial, ,	1st Reference Reagent, 2009	Virus suspension	NIBSC	00/410	09.2103	
MAPREC analysis of Poliovirus type 1, (High mutant virus reference), Liquid frozen 2.56% 480A,525C/vial, ,	1st Reference Reagent, 2009	Virus suspension	NIBSC	00/422	09.2103	
MAPREC analysis of Poliovirus type 1, (Low mutant virus reference), Liquid frozen 1.84% 480A,525C/vial, ,	1st Reference Reagent, 2009	Virus suspension	NIBSC	00/416	09.2103	
MAPREC analysis of poliovirus type 3 (Sabin), Lyophilized, 0.9% 472-C nucleotide / vial.	1st International Standard, 1996	Chemically synthesized DNA	NIBSC	95/542	96.1841	
MAPREC analysis of poliovirus type 3 (Sabin), high virus reference, Lyophilized, 1.1% 472-C nucleotide / vial.	1st Reference Reagent, 1997	Chemically synthesized DNA	NIBSC	96/578	97.1865	
MAPREC analysis of poliovirus types 3 (Sabin), low virus reference, Lyophilized, 0.7% 472-C nucleotide / vial.	1st Reference Reagent, 1997	Chemically synthesized DNA	NIBSC	96/572	97.1865	
MAPREC assay for poliovirus type 2, Lyophilized, 0.67% 481-G per ampoule.	1st International Standard, 2003	Chemically synthesized DNA	NIBSC	97/758	03.1957	
MAPREC assay of poliovirus type 2 (481-G control), Lyophilized, 93.5% 481-G per ampoule.	1st Reference Reagent, 2003	Chemically synthesized DNA	NIBSC	98/524	03.1957	
MAPREC assay of poliovirus type 2 (high mutant virus), Lyophilized, 1.21% 481-G per ampoule.	1st Reference Reagent, 2003	Chemically synthesized DNA	NIBSC	98/596	03.1957	
MAPREC assay of poliovirus type 2 (low mutant virus), Lyophilized., 0.65% 481-G per ampoule.	1st Reference Reagent, 2003	Chemically synthesized DNA	NIBSC	97/756	03.1957	
Measles vaccine (live), Lyophilized, 4.3 log <sub>10</sub> (20 000) infectious units / vial.	2nd International Reference Reagent, 1994	Attenuated measles virus	NIBSC	92/648	94.1771	
Mumps vaccine (live), Lyophilized, 4.6 log <sub>10</sub> (40000) infectious units / vial.	1st International Reference Reagent, 1994	Attenuated mumps virus	NIBSC	90/534	94.1772	
Mycobacterium bovis BCG vaccine (Danish strain) Lyophilized. 72.9 million colony forming units or 56.06 ng ATP per ampoule, ,	1st Reference Reagent, 2009	Antigen	NIBSC	07/270	09.2114	
Mycobacterium bovis BCG vaccine (Moscow I strain) Lyophilized. 3.39 colony forming units or 7.52 ng ATP per ampoule, ,	1st Reference Reagent, 2009	Antigen	NIBSC	07/274	09.2114	
Mycobacterium bovis BCG vaccine (Tokyo strain) Lyophilized. 49.37 million colony forming units or 217.60 ng ATP per ampoule, ,	1st Reference Reagent, 2009	Antigen	NIBSC	07/272	09.2114	








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Neisseria meningitidis serogroup C polysaccharide, Lyophilized., 1.192 mg ± 0.192 MenC PS/ampoule	1st International Standard, 2011	Antigen	NIBSC	08/214	2011.2169	
Neomycin, Lyophilized, 775 IU / mg. Ampoules containing approximately 50 mg of neomycin sulfate.	2nd International Reference Preparation, 1975	Antibiotic	EDQM	72/406	75.1097	
Neomycin B, Lyophilized, 670 IU / mg. Ampoules containing approximately 25 mg of neomycin B sulfate.	1st International Reference Preparation, 1975	Antibiotic	EDQM	68/041	75.1098	
Nerve growth factor, human, Lyophilized, 10,000 units / ampoule.	1st Reference Reagent, 1996	Recombinant growth factor	NIBSC	93/556	96.1836	
Netilmicin, Lyophilized, 4,810 IU / ampoule.	1st International Standard, 1989	Antibiotic	EDQM	83/577	89.1628	
Newcastle disease vaccine (inactivated), Lyophilized, 525 IU / ampoule.	1st International Standard, 1963	Antigen	NIBSC	NVIA	63.626	
Nystatin, Lyophilized, 5710 IU / mg. Approximately 100 mg of Nystatin	3rd International Standard, 2007	Antibiotic	EDQM	ISA_29384	07.2072	
Oncostatin M, human, Lyophilized, 25,000 units / ampoule.	1st Reference Reagent, 1996	Recombinant cytokine	NIBSC	93/564	96.1851	
Opacity, , 10 IU of opacity.	5th International Standard, 1975	Miscellaneous	NIBSC	76/522	75.1119	
Oxytocin, Lyophilized, 12.5 IU / ampoule.	4th International Standard, 1978	Synthetic oxytocin peptide	NIBSC	76/575	78.1227	
Parathyroid hormone 1-34, recombinant, human, Lyophilized, 0.89 mg / ampoule; 8900 IU / ampoule.	1st International Standard, 2007	Recombinant hormone	NIBSC	04/200	07.2063	
Parathyroid hormone 1-84, human Lyophilized 100 ug per ampoule, ,	1st International Standard, 2009	Recombinant protein	NIBSC	95/646	09.2115	
Parathyroid hormone, bovine, Lyophilized, 39 IU / ampoule.	1st International Standard, 1985	Parathyroid peptide hormone	NIBSC	82/632	85.1490	
Parathyroid hormone, human, for immunoassay, Lyophilized, 0.1 IU / ampoule.	1st International Reference Preparation, 1981	Parathyroid peptide hormone	NIBSC	79/500	81.1315	
Parvovirus B19 DNA human, Lyophilized, 500,000 IU/vial	2nd International Standard, 2008	Parvovirus B19 positive donation diluted in human plasma	NIBSC	99/802	08.2082	
Parvovirus B19 DNA, Genotypes 1,2,3a, negative control, Liquid frozen, No unitage assigned	1st International Reference Panel, 2009	Human plasma	NIBSC	09/110	09.2122	
Pertussis antiserum (human), anti-PT IgG, Lyophilized, 335 IU and anti-PT IgA 65 IU / ampoule; anti-FHA IgG 130 IU and anti-FHA IgA 65 IU / ampoule; anti-69K IgG 65 IU and anti-PT IgA 42 IU / ampoule	1st International Standard, 2008	Human serum	NIBSC	06/140	08.2083	
Pertussis serotype 2, typing serum (anti-Bordetella pertussis fimbriae), , No assigned value.	1st Reference Reagent, 2004	Monoclonal IgG (mouse)	NIBSC	04/154	04.1998	
Pertussis serotype 3, typing serum (anti-Bordetella pertussis fimbriae), Frozen, No assigned value.	1st Reference Reagent, 2004	Monoclonal IgG (mouse)	NIBSC	04/156	04.1998	
Pertussis toxin, purified, Lyophilized, 10000 IU / ampoule.	1st International Standard, 2003	Toxin	NIBSC	JNIH-5	03.1978	
Pertussis vaccine (whole cell) 41S, Lyophilized, 40 IU / ampoule.	4th International Standard, 2006	Inactivated bordetella pertussis	NIBSC	94/532	06.2036	


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Placental lactogen, human, for immunoassay, Lyophilized, 0.000 850 IU / ampoule.	1st International Reference Preparation, 1977	Purified placental protein	NIBSC	73/545	77.1141
Plasmin, Lyophilized, 5.3 IU/ampoule.	3rd International Standard, 1998	Human plasma protein	NIBSC	97/536	98.1887
Plasminogen-Activator Inhibitor 1 (PAI-1), Lyophilized, Tissue-plasminogen-activator: 27.5 IU of neutralising activity/ampoule. Urinary-plasminogen-activator: 7 IU of neutralising activity/ampoule.	1st International Standard, 1995	Recombinant protein [Chinese Hamster Ovary cells (CHO)], spiked in human plasma	NIBSC	92/654	95.1805
Plasmodium falciparum DNA, Lyophilized, 500,000,000 IU/vial.	1st International Standard, 2006	Human blood	NIBSC	04/176	06.2035 
Platelet derived growth factor-BB isoform, human, Lyophilized, 3,000 IU / ampoule.	1st International Standard, 1997	Recombinant growth factor	NIBSC	94/728	97.1864
Platelet factor 4, Lyophilized, 400 IU/ampoule	1st International Standard, 1984	Human platelet protein	NIBSC	83/505	84.1455
Pneumococcal Serum, Lyophilized., Type 1, 8.50 microgram/mL; Type 3, 1.45; Type 4, 3.33; Type 5, 7.51; Type 6A, 3.93; Type 6B, 9.05; Type 7F, 8.30; Type 9V, 6.44; Type 14, 37.99; Type 18C, 7.30; Type 19A 13.87; Type 19F, 14.61; Type 23F 5.95	1st International Standard, 2011	Human serum	NIBSC	007sp	2011.2164 
Poliomyelitis vaccine (inactivated), Lyophilized, Type 1 antigen: 430 D-antigen units / ml, Type 2 antigen: 95 D-antigen units / ml, Type 3 antigen: 285 D-antigen units / ml.	1st International Reference Reagent, 1994	Inactivated polioviruses	NIBSC	91/574	94.1777
Poliomyelitis vaccine, oral, Frozen, 7.51 log10 TCID 50/ml poliovirus type 1. 6.51 log10 TCID 50/ml poliovirus type 2. 6.87 log10 TCID 50/ml poliovirus type 3. 7.66 log10 TCID 50/ml total poliovirus content.	2nd International Standard for potency testing, 2004	Antigen	NIBSC	02/306	04.1992 
Polymyxin B , , 8,403 IU / mg. Approximately 75 mg of purified polymyxin B sulfate.	2nd International Standard, 1969	Antibiotic	EDQM	67/301	69.990
Prader Willi & Angelman Syndromes: six panel members Freeze-dried No unitage assigned, ,	1st International Reference Panel, 2009	Human Genomic DNA	NIBSC	09/140	09.2105 
Prekallikrein activator, Lyophilized, 29 IU/ampoule	2nd International Standard, 2003	Purified from human plasma	NIBSC	02/168	03.1974 
Proinsulin, bovine, for immunoassay, Lyophilized, 25 µg / ampoule.	1st International Standard, 1986	Pancreatic enzyme	NIBSC	84/514	86.1534
Proinsulin, human, Lyophilized, 6 µg / ampoule.	1st International Reference Reagent, 1986	Recombinant proinsulin	NIBSC	84/611	86.1537
Proinsulin, porcine, for immunoassay, Lyophilized, 20 µg / ampoule.	1st International Standard, 1986	Pancreatic enzyme	NIBSC	84/528	86.1534
Prolactin, human, Lyophilized, 0.053 IU / ampoule.	3rd International Standard, 1988	Pituitary hormone	NIBSC	84/500	86.1520
Prolactin, recombinant human, for immunoassay, Lyophilized, Nominal content for immunization calibration: 24.5 µg / ampoule; for bioassay calibration: 1,400 mU / ampoule.	1st Reference Reagent, 2001	rDNA derived prolactin	NIBSC	97/714	01.1942
Prolactin, recombinant human, glycosylated form, for immunoassay, Lyophilized, Nominal content for immunization calibration: 5.5 µg / ampoule; for bioassay calibration: 88 mU / ampoule.	1st Reference Reagent, 2001	Recombinant hormone	NIBSC	98/580	01.1942



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 Prolactin, recombinant human, non-glycosylated form, for immunoassay, Lyophilized, 10.5 µg / ampoule; for bioassay: 670 mU / ampoule.	1st Reference Reagent, 2001	rDNA derived prolactin, non-glycosylated form	NIBSC	98/582	01.1942	
 Prostate specific antigen, Lyophilized, 1 µg total PSA per vial	1st Reference Reagent, 1999	Seminal plasma-derived	NIBSC	96/668	99.1902, 2011.2161	
 Prostate specific antigen (90:10), Lyophilized, 1 µg total PSA per vial.	1st Reference Reagent, 1999	Seminal plasma-derived	NIBSC	96/670	99.1902	
 Protein C, Lyophilized, 0.85 IU/ampoule (function), 0.84 IU/ampoule (antigen).	2nd International Standard, 2006	Human plasma	NIBSC	02/342	06.2045	
 Protein C, concentrate, human, Lyophilized, 14.3 IU/ampoule (antigen), 15.0 IU/ampoule (functional activity by chromogenic assay).	1st International Standard, 2007	Purified plasma protein	NIBSC	04/252	07.2067	
 Protein S, Lyophilized, 0.83 IU/ampoule (total antigen), 0.81 IU/ampoule (free antigen), 0.77 IU/ampoule (function).	2nd International Standard, 2006	Human plasma	NIBSC	03/228	06.2046	
 Prothrombin Mutation G20210A; three samples: wild type, homozygote, heterozygote, Lyophilized, No assigned activity.	1st International Genetic Reference Panel, 2005	Genetic material	NIBSC	05/130	05.2022	
 Rabies vaccine, Lyophilized, 8 IU / ampoule for the in vivo mouse challenge assay; 3.3 IU glycoprotein antigen / ampoule for in vitro assays.	6th International Standard, 2008	Vaccine	NIBSC	07/162 (RAV)	08.2087	
 RBC1, RBC4, RBC5, RBC12 blood group genotyping alleles, Lyophilized, No unitage assigned	1st Reference Panel, 2011	Genomic DNA	NIBSC	10/232, 10/234, 10/236, 10/238	2011.2166	
 Recombinant Human Luteinizing hormone, Lyophilized, 189 IU / ampoule.	1st International Standard, 2003	Recombinant hormone	NIBSC	96/602	03.1983	
 Recombinant Serum Transferrin Receptor (rsTfR), Lyophilized, 21.7mg/L (303 nmol/L)	1st Reference Reagent, 2009	Recombinant protein	NIBSC	07/202	09.2104	
 Renin, human, Lyophilized, 0.1 IU / ampoule.	1st International Reference Preparation, 1974	Kidney extract derived	NIBSC	68/356	74.1089	
 RHD/SRY DNA, minimum sensitivity reagent, Lyophilized, 1 in 2 dilution defines the recommended minimum dilution at which both RHD and SRY should be detected	1st Reference Reagent, 2010	Human plasma	NIBSC	07/222	10.2149	
 Rheumatoid arthritis serum, Lyophilized, 100 IU/ampoule	1st International Reference Preparation, 1973	Human serum	NIBSC	W1066	73.1067	
 Rifamycin SV, Lyophilized, 887 IU / mg. Approximately 100 mg of sodium Rifamycin SV.	1st International Reference Preparation, 1967	Antibiotic	EDQM	66/231	67.885	
 Rubella vaccine (live), Lyophilized, 3.9 log <sub>10</sub> (8 000) infectious units / vial.	1st International Reference Reagent, 1994	Attenuated rubella virus	NIBSC	91/688	94.1773	
 Serum amyloid A protein, Lyophilized, 0.15 IU/ampoule.	1st International Standard, 1997	Human serum	NIBSC	92/680	97.1860	
 Sex hormone binding globulin (SHBG), Lyophilized, 180 IU / ampoule.	2nd International Standard, 2010	Human serum	NIBSC	08/266	10/2141	

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Short ragweed pollen extract ( <i>Ambrosia elatior</i> ), Lyophilized, 100,000 IU / ampoule.	1st International Standard, 1983	Defatted short ragweed pollen	NIBSC	84/581	83.1412
Sisomicin, Lyophilized, 35,200 IU / ampoule.	1st International Standard, 1984	Antibiotic	EDQM	80/543	84.1434
Smallpox vaccine, Lyophilized, 14 mg / ampoule.	1st International Standard, 1962	Antigen	NIBSC	SMV	61.536
Somatropin (rDNA-derived human growth hormone), Lyophilized, 1.95 mg protein / ampoule.	2nd International Standard, 2000	Recombinant hormone / E.coli	NIBSC	98/574	00.1929, 10.2135 (URL link) 
Spiramycin, Lyophilized, 3,200 IU / mg. Approximately 50 mg.	1st International Reference Preparation, 1964	Antibiotic	EDQM	62/008	64.692
Staphylococcus-alpha antitoxin, equine, Lyophilized, 220 IU /	3rd International Standard, 1982	Horse serum	NIBSC	STA	82.1345
Stem cell factor, human, Lyophilized, 1,000 units / ampoule.	1st Reference Reagent, 1997	Recombinant cytokine	NIBSC	91/682	97.1859
Streptodornase, Lyophilized, 3,200 IU/ampoule	2nd International Standard, 2009	Streptococcus haemolyticus enzyme	NIBSC	08/230	09.2112 
Streptokinase, Lyophilized, 1,030 IU/ampoule	3rd International Standard, 2001	Purified from streptococcus hemolyticus culture	NIBSC	00/464	01.1948
Streptomycin, Lyophilized, 78,500 IU / ampoule.	3rd International Standard, 1980	Antibiotic	EDQM	76/539	80.1273
Swine erysipelas serum (anti-N), Lyophilized, 628 IU / ampoule.	1st International Standard, 1954	Horse serum	NIBSC	SES	54.297
Teicoplanin, Lyophilized, 51,550 IU / ampoule.	1st International Standard, 1990	Antibiotic	EDQM	90/704	90.1642
Tetanus toxoid (absorbed) for potency assay, Lyophilized, 490 IU / ampoule.	4th International Standard, 2010	Toxoid	NIBSC	08/218	10.2150 
Tetanus toxoid, for flocculation tests, Lyophilized, 690 Lf / ampoule.	2nd International Standard, 2010	Toxoid	NIBSC	04/150 (TEFT)	07.2061, 10.2136 
Tetracosactide, Lyophilized, 490 IU / ampoule.	1st International Reference Preparation, 1981	Synthetic peptide	NIBSC	80/590	81.1313
Thrombin, human, Lyophilized, 110 IU/ampoule	2nd International Standard, 2003	Purified plasma protein	NIBSC	01/580	03.1955 
Thromboplastin, human, recombinant plain, Lyophilized, International Sensitivity Index:1.082	4th International Standard, 2009	Recombinant protein and mixed phospholipids	NIBSC	08/144	09.2125 
Thromboplastin, rabbit, plain, Lyophilized, International Sensitivity Index (ISI) value of 1.15.	3rd International Standard, 2005	Brain-derived	NIBSC	RBT/05	05.2029 
Thyroid stimulating hormone, human, for immunoassay, Lyophilized, 11.5 x -3 log 10 IU / ampoule.	3rd International Standard, 2003	Pituitary hormone	NIBSC	81/565	03.1975 
Thyroid-stimulating antibody, Lyophilized, 0.113 IU / ampoule.	2nd International Standard, 2010	Human serum	NIBSC	08/204	10.2142 
Thyroid-stimulating hormone, human, recombinant, Lyophilized, 0.0067 units / ampoule.	1st Reference Reagent, 1996	Recombinant hormone, [Chinese Hamster Ovary cells (CHO)]	NIBSC	94/674	96.1843

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Thyroxine-binding globulin, Lyophilized, 30 IU / ampoule.	1st International Standard, 1991	Human serum derived	NIBSC	88/638	91.1671
Timothy (Phleum pratense) pollen extract, Lyophilized, 100,000 IU / ampoule.	1st International Standard, 1983	Phleum pratense allergenic extract	NIBSC	82/520	83.1411
Tissue Plasminogen Activator (t-PA), human, recombinant, Lyophilized, 10,000 IU/ampoule.	3rd International Standard, 1999	r-tPA. [Chinese Hamster Ovary cells (CHO)]	NIBSC	98/714	99.1913
Tissue plasminogen activator antigen in plasma, Lyophilized, 25 ng/ml.	1st International Standard, 2007	Human plasma	NIBSC	94/730	07.2068 
TNF-related apoptosis inducing ligand, Lyophilized, 10,000 units / ampoule.	1st Reference Reagent, 2007	Recombinant cytokine human	NIBSC	04/166	07.2058 
Tobramycin, Lyophilized, 9,800 IU / ampoule.	2nd International Standard, 1985	Antibiotic	EDQM	82/510	85.1504
Transforming Growth Factor-BETA 3 (Human, rDNA derived TGF-β 3), Lyophilized., 19,000 IU/ampoule	1st International Standard, 2011	Recombinant growth factor	NIBSC	09/234	2011.2163 
Tuberculin, old, Liquid, 90,000 IU / ml.	3rd International Standard, 1965	Mycobacterium tuberculosis culture derived	NIBSC	TU	65.779
Tuberculin, purified protein derivative (PPD), avian, Lyophilized, 500,000 IU / ampoule.	1st International Standard, 1954	Mycobacterium avium culture derived	NIBSC	PPDA	53.227
Tuberculin, purified protein derivative (PPD), bovine, Lyophilized, 58,500 IU / ampoule.	1st International Standard, 1986	Mycobacterium bovis culture derived	NIBSC	PPD BOV	86.1518
Tuberculin, purified protein derivative (PPD), mammalian, Lyophilized, 5,000 IU / ampoule.	1st International Standard, 1951	Mycobacterium tuberculosis culture derived	NIBSC	PPDT	51.127
Tumor necrosis factor, alpha, human, natural, Lyophilized, 46500 IU / ampoule.	2nd International Standard, 2003	Recombinant cytokine	NIBSC	88/786	91.1681
Tumor necrosis factor, beta, human, Lyophilized, 150,000 units / ampoule.	1st Reference Reagent, 1996	Recombinant cytokine	NIBSC	87/640	96.1852
Typhoid vaccine (acetone-inactivated), Lyophilized, No unitage assigned.	1st International Reference Preparation, 1960	Inactivated salmonella typhi	NIBSC	TYVK	60.515
Typhoid vaccine (heat-phenol-inactivated), Lyophilized, No unitage assigned.	1st International Reference Preparation, 1960	Inactivated salmonella typhi	NIBSC	TYVL	60.515
Urokinase, high molecular weight, Lyophilized, 3,200 IU/ampoule	2nd International Standard, 2012	Two-chain urine derived protein	NIBSC	11/184	2012.2205 
Vancomycin, Lyophilized, 109,700 IU per vial	2nd International Standard, 2010	Antibiotic	EDQM	ISA 39036	10.2151 
Vascular endothelial growth factor, human, Lyophilized, 13000 units per ampoule.	1st Reference Reagent, 2005	Recombinant growth factor	NIBSC	02/286	05.2028
Vitamin B12 and folate in human serum, Lyophilized, 12.08 nmol/L of folate and 480 pg/mL of vitamin B12 per ampoule	1st International Standard, 2005	Human serum	NIBSC	03/178	05.2025 
von Willebrand factor, concentrate, Lyophilized, VWF:RCo 9.2 IU/ampoule; VWF:Ag 10.7 IU/ampoule; VWF:CB 10.3 IU/ampoule	2nd International Standard, 2010	Purified plasma protein	NIBSC	09/182	10.2147 

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 Yellow fever vaccine, Lyophilized, 4.5 log 10 IU / ampoule.	1st International Standard, 2003	Attenuated yellow fever virus	NIBSC	99/616	03.1985 Rev.1