

hSPAG9

Manufactured by: *Syngene*

Syngene International Ltd, Biocon Park, Plot No. 2
& 3, Bommasandra, Jigani Link Road, Bangalore
560099, India

Manufactured for:



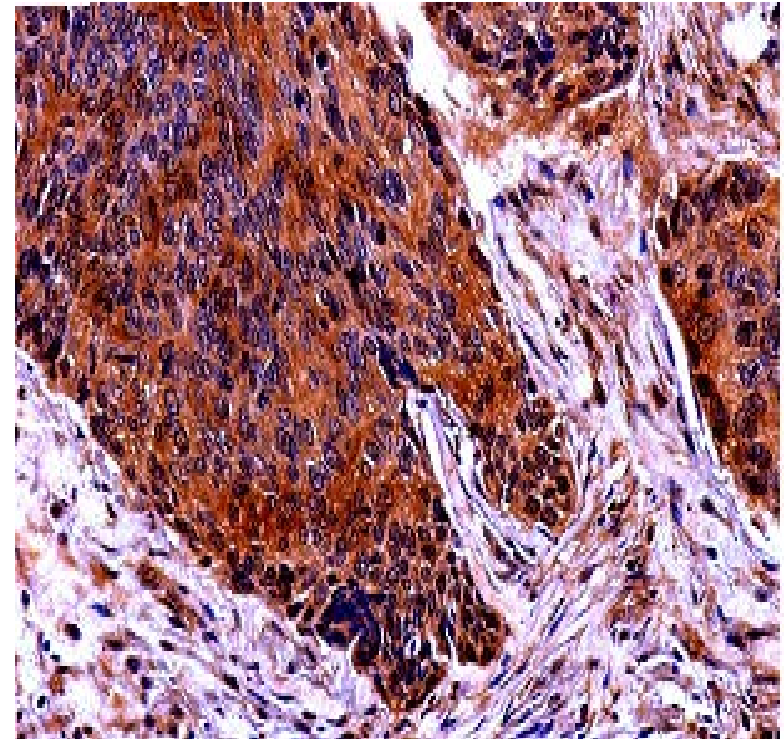
National Institute of Immunology, Aruna
Asaf Ali Marg, New Delhi 110067, India.

Dr. Anil Suri, Convener, Cancer Research Program
Outcome of Cancer Research Program:
Bench side to Bed side for better cancer treatment:
Sperm-Associated Antigen 9 (SPAG9)



Translating basic Research to Clinical Cancer research For Cervical cancer treatment

- **Recombinant SPAG9 protein will be used for Phase II Human clinical trials using dendritic cell based vaccine in cervical cancer patients at Cancer Institute, Adiyar, Chennai.**
- **Approval granted from Directorate General of Health Services Office of Drugs Controller General (India) Biological Division: F. No: Stm-CI/44/WIA/14-BD (DCGI) Protocol No. CI/MOL ONC/DC VACCINE, Version 5.0 [DCG (I)] for Human clinical trials**
- **Recombinant SPAG9 manufacturing has been outsourced to Syngene International (Biocon Limited), Bangalore, for Human clinical trials.**
- **Approval has been obtained from Review Committee on Genetic Manipulation [RCGM], Department of Biotechnology for handing over the recombinant human SPAG9 for clinical trials**
- **All approvals have been obtained including Institutional Biosafety committee [IBSC], Institute Human Ethics committee [IHEC], NII**



SPAG9 expression in cervical cancer patient: Tissue specimen (stage IIIb)

Human Clinical trials are expected to start during March 2016

If successful, this will be an important advance and an example of translational research outcome from persistent work of high quality.

DBT grant number: Indo-UK Cancer Research Program (Grant No. BT/IN/UK/NII/2006 dated 22.03.2007)

Publications

1. . M. Garg, D. Kanojia, S. Salhan, S. Suri, A. Gupta, N. K. Lohiya, and **A. Suri** Sperm- Associated Antigen 9 (SPAG9) is a Biomarker for Early Cervical Carcinoma. **Cancer**. 115(12):2671-83, **2009**.
2. M. Garg, D. Kanojia, S. Suri, and **A. Suri**. Small Interfering RNA-Mediated Down regulation of Sperm-Associated Antigen 9 Inhibits Cervix Tumor Growth **Cancer**. 115:5688-5699, **2009**.
3. D. Kanojia, M. Garg, S. Gupta, A. Gupta, and **A. Suri** Sperm Associated Antigen 9 (SPAG9), a Novel Biomarker for Early Detection of Breast Cancer. **Cancer Epidemiology Biomarkers & Prevention** 18(2):630-639 , **2009**.
4. M. Garg, D. Chaurasiya, R. Rana et al, **A. Suri** Sperm Associated Antigen 9 (SPAG9), a Novel Cancer Testis Antigen is Potential Target for Immunotherapy in Epithelial Ovarian Cancer. **Clinical Cancer Research** 13(5):1421-428, **2007**.

Patents

1. Inventor: Suri A; (2012) Novel Cancer Associated antibodies & Antigens and their use in cancer diagnosis. **Europe Patent No EP 1796723** (Filed on Sept 4, 2007, **Granted on Oct 12, 2012**)
2. Inventor: Suri A; (2012) Inhibition of SPAG9 expression with siRNAs. Country: **United States of America Patent No. US 8,227,597** (Filed on Aug 8, 2007, **Granted on July 24, 2012**)
3. Inventor: Suri A; (2012) Novel Cancer Associated antibodies & Antigens and their use in cancer diagnosis. Country: **Australia Patent No. AU2005290997** (Filed on April 4, 2007 **Granted on Dec 20, 2012**)
4. Inventor: Suri A; (2012) Novel Cancer Associated antibodies & Antigens and their use in cancer diagnosis. Country: **United Kingdom UK Patent No.UK 1796723** (Filed on Sept 24, 2012 **Granted on Oct 12, 2012**)
5. Inventor: Suri A; (2012) Novel Cancer Associated antibodies & Antigens and their use in cancer diagnosis. Country: **Singapore Patent No. 156619** (Filed on Oct 7, 2009 **Granted on July 13, 2012**)
6. Inventor: Suri A Novel Nucleotide Sequences, Country: **Australia Patent No: 2006219666 (Granted May 12, 2011)**
7. Inventor: Suri A Novel Nucleotide Sequences, Country: **Singapore Patent No: 135339 (Granted June 15, 2010)**
8. Inventor: Suri A; Inhibition of SPAG9 expression with siRNAs. Country: **Singapore Patent No: SG135339 (Granted June 15, 2010)**
9. Inventor: Suri A; Inhibition of SPAG9 expression with siRNAs Country: **Europe (Validated in Germany, France, Finland, UK, Italy, Sweden, Switzerland) Patent No: EP1861496 (Granted September 16, 2009)**
10. Inventor: Suri A (2007) Dendritic cell vaccine composition **252/DEL/2007 Country: India.**
11. Inventor: Suri A (2007) Novel antibodies for treatment of cancer **253/DEL/2007 Country: India**
12. Inventor: Suri A (2007) Novel immunotherapeutic method for treatment of cancer **254/DEL/2007, Country: India.**