DIALOG
A THOMSON COMPANY

159

# CANCERLIT®

## FILE DESCRIPTION

**CANCERLIT®** is produced by the International Cancer Research DataBank Branch (ICRDB) of the U.S. National Cancer Institute. The database consists of bibliographic records referencing cancer research publications dating from 1963 to the present. Most records contain abstracts, and all records contain citation information and additional descriptive fields such as document type and language. Beginning with the June 1983 CANCERLIT update, records from the MEDLINE® database dealing with cancer topics have been added to CANCERLIT.

Records added to CANCERLIT since January 1980 are indexed using the U.S. National Library of Medicine (NLM) Medical Subject Heading (MeSH®). The CANCERLIT records with MeSH descriptors are updated annually with the current version of MeSH headings. An online thesaurus is available to aid in locating MeSH descriptors. All records added before June 1983 have abstracts; approximately 75% of the records added since June 1983 have abstracts.

## SUBJECT COVERAGE

- All aspects of experimental and clinical cancer therapy
- Biochemistry, immunology, physiology, and other biology of cancer, both in vivo and in vitro
- Chemical, viral, and other agents that cause cancer
- Mechanisms of carcinogenesis
- Studies of mutagens, mutagen testing, and growth factors or other agents that stimulate cell division

## SOURCES

**CANCERLIT** includes indexing for articles from more than 3,500 journals; approximatley 200 core journals contribute a large percentage of the citations. Selected records are taken from the MEDLINE database beginning in June 1983. In addition, proceedings of meetings, government reports, symposia reports, selected monographs, and theses are also abstracted for inclusion in the database.

## TIPS

**USE THE (L) OPERATOR**

to link descriptors and subheadings:

```
S PROTEIN KINASES(L)ME
S CELL DIVISION(L)DRUG EFFECTS
```

**USE EXPLODE (!)**

to search narrower descriptors in the MeSH vocabulary:

```
S TUMOR CELLS, CULTURED!
```

**USE THE ONLINE THESAURUS**

to check and select MeSH thesaurus terms:

```
E (DNA DAMAGE)
```

**USE MAP**

to take CAS® Registry Numbers to another file:

```
MAP RN TEMP S1
```

**USE LIMITS**

```
/HUMAN for human subjects
/ENG for English-language articles
```

## DIALOG FILE DATA

Inclusive Dates: 1975 to the present
Update Frequency:
Monthly (Approximately 7,000 records per update)
File Size: Over 1,595,000 records as of August 2000

## CONTACT

CANCERLIT is produced by the U.S. National Cancer Institute (NCI). Questions concerning file content should be directed to:

National Library of Medicine
MEDLARS Management Section
8600 Rockville Pike
Bethesda, MD 20894
Phone: 301-594-5983
Toll Free: 888-346-3656
Fax: 301-496-0822

## SAMPLE RECORD

DIALOG(R)File 159:CancerLit(R)


**AN=** 01603257 20270250

**/TI** Distinct Chk2 activation pathways are triggered by genistein and DNA-damaging agents in human melanoma cells.

**AU=** Darbon JM; Penary M; Escalas N; Casagrande F; Goubin-Gramatica F; Baudouin C; Ducommun B

**CS=** Laboratoire de Biologie Cellulaire et Moleculaire du Controle de la Proliferation Cellulaire, UMR 5088 CNRS, Universite Paul Sabatier, 118 Route de Narbonne, 31062 Toulouse Cedex, France. darbon@cict.fr

**JN=,PY=,SN=,JC=** J Biol Chem; 275(20):15363-9 2000 ISSN 0021-9258 Journal Code: HIV

**CN=** Contract/Grant No.: CA44579, CA, NCI

**NT=** Comment in Cancer Invest 2000 ;18(5):498-500

**LA=** Languages: ENGLISH

**DT=** Document Type: JOURNAL ARTICLE

**JA=** Journal Announcement: 200007

**SF=** Subfile: L; M; X MEDL/20270250

**/AB** Genistein, a natural isoflavone found in soybeans, exerts a number of biological actions suggesting that it may have a role in cancer prevention. We have previously shown that it potently inhibits OCM-1 melanoma cell proliferation by inducing a G(2) cell cycle arrest. Here we show that genistein exerts this effect by impairing the Cdc25C-dependent Tyr-15 dephosphorylation of Cdk1, as the overexpression of this phosphatase allows the cells to escape G(2) arrest and enter an abnormal chromatin condensation stage. Caffeine totally overrides the genistein-induced G(2) arrest, whereas the block caused by etoposide is not bypassed and that caused by adriamycin is only partially abolished. We also report that genistein activates the checkpoint kinase Chk2 as efficiently as the two genotoxic agents and that caffeine may counteract the activation of Chk2 by genistein but not by etoposide. In contrast, caffeine abolishes the accumulation of p53 caused by all the compounds. Wortmannin does not suppress the Chk2 activation in any situation, suggesting that the ataxia telangiectasia-mutated kinase is not involved in this regulation. Finally, unlike etoposide and adriamycin, genistein induces only a weak response in terms of DNA damage in OCM-1 cells. Taken together, these results suggest that the G(2) checkpoints activated by genistein and the two genotoxic agents involve different pathways.

**/GS** Tags: Human; Support, Non-U.S. Gov't

**/DE** Major Descriptors: Caffeine--Pharmacology--PD; *Cell Cycle-- Drug Effects --DE; *Cell Division-- Drug Effects--DE; *Doxorubicin --Pharmacology--PD; *DNA Damage; *Etoposide--Pharmacology--PD; *Genistein--Pharmacology--PD; *Protein Kinases--Metabolism--ME
Minor Descriptors: cdc25 Phosphatase--Metabolism--ME; Cell Cycle Proteins --Metabolism--ME; Choroid Neoplasms; Enzyme Activation; G2 Phase; Melanoma; Tumor Cells, Cultured

**/ID,RN=** CAS Registry No.: 0 (Cdc25C protein); 0 (Cell Cycle Proteins); 23214-92-8 (Doxorubicin); 33419-42-0 (Etoposide); 446-72-0 (Genistein) ; 58-08-2 (Caffeine)

**/ID,EC=** Enzyme No.: EC 2.7.1.- (Cds1 kinase); EC 2.7.1.37 (Protein Kinases); EC 3.1.3.- (cdc25 Phosphatase)

## SEARCH OPTIONS

### BASIC INDEX

| SEARCH SUFFIX | DISPLAY CODE | FIELD NAME | INDEXING | SELECT EXAMPLES |
|---|---|---|---|---|
| — | — | All Basic Index Fields | Word | S GENOTOXIC(W)AGENT? |
| /AB | AB | Abstract[1] | Word | S MELANOMA(W)CELL?/AB |
| /DE | DE | Descriptor[2,3] | Word & Phrase | S PROTEIN(W)KINASES/DE<br>S CHOROID NEOPLASMS/DE |
| /GS | GS | Check Tags[3] | Word & Phrase | S SUPPORT(3W)GOV?/GS<br>S SUPPORT, NON-U.S. GOV'T/GS |
| /ID | ID | Identifier [4,5,6,7] | Word & Phrase | S CELL(W)CYCLE(W)PROTEIN?/ID<br>S CDS25C PROTEIN/ID |
| /TI | TI | Title | Word | S HUMAN(W)MELANOMA(W)CELL?/TI |

[1] Abstracts present for about 75% of the records added since June 1983. Abstracts present for all records added before June 1983.

[2] Also /DE*, /DF, /DF*.

[3] Records added prior to January 1980 do not have MeSH descriptors or check tags.

[4] Also /IF.

[5] Includes CAS Registry Number, Enzyme Commission Number, Gene Symbol, Enzyme Name, Chemical Name.

[6] Beginning in June 1983 for MEDLINE-derived records, and beginning in June 1985 for all other records. Includes gene symbol in 1991-1995 which is searchable using /DE or /ID and displayable either in the DE field or in the ID field.

[7] Chemical Names and Enzyme Names are searchable in the Basic Index as /ID; CAS Registry Number and Enzyme Commission Number are searchable in the Additional Indexes as EC= and RN=. A search term will appear in the display in the RN field or the EC field.

### ADDITIONAL INDEXES

| SEARCH PREFIX | DISPLAY CODE | FIELD NAME | INDEXING | SELECT EXAMPLES |
|---|---|---|---|---|
| — | AN | DIALOG Accession Number | | |
| AN= | AN | NLM Accession Number | Phrase | S AN=20270250 |
| AU= | AU | Author | Phrase | S AU=DARBON JM |
| BN= | BN | International Standard Book Number (ISBN)[8] | Phrase | S BN=0-306-45136-0 |
| CN= | CN | Contract/Grant Number[9] | Phrase | S CN=CA44579 |
| CS= | CS | Corporate Source | Word & Phrase | S CS=(UNIVERSITE(W)PAUL(W)SABATIER)<br>S CS=LABORATOIRE DE BIOLOGIE? |
| DC= | — | Descriptor Code[10] | Phrase | S DC=G4.335.135. |
| DT= | DT | Document Type | Phrase | S DT=JOURNAL ARTICLE |
| EC= | EC | Enzyme Commission Number | Phrase | S EC=2.7.1.37 |
| JA= | JA | Journal Announcement | Phrase | S JA=200007 |
| JC= | JC | Journal Code[11] | Phrase | S JC=HIV |
| JN= | JN | Journal Name[12] | Phrase | S JN=JOURNAL OF BIOLOGICAL CHEMISTRY |
| LA= | LA | Language | Phrase | S LA=ENGLISH |
| NT= | NT | Note/Comment[13] | Word | S NT=(CANCER(W)INVEST?) |
| PY= | PY | Publication Year | Phrase | S PY=2000 |
| RN= | RN | CAS(R) Registry Number[14] | Phrase | S RN=23214-92-8 |
| SF= | SF | Subfile | Phrase | S SF=MEDL |
| SN= | SN | International Standard Serial Number (ISSN)[15] | Phrase | S SN=0021-9258 |
| SO= | SO | Source Information[16] | Word | S SO=(JOURNAL(2W)CHEMISTRY) |
| UD= | — | Update | Phrase | S UD=9999 |

[8] Available from 1990 forward.

[9] For MEDLINE-derived records beginning in June 1980.

[10] Descriptor Code Explodes can also be searched using the descriptor name followed by an exclamation mark (i.e., SELECT CELLS, CULTURED!). Descriptor codes do not display in records.

[11] Beginning in June 1980 for journals indexed by NLM.

[12] Journal Names are searchable as either the full name or the abbreviated name depending on a record; displayable as the abbreviated name.

[13] Beginning in 1989 for MEDLINE-derived records only.

[14] Beginning in June 1980 for MEDLINE records and in June 1985 for all other records.

[15] Not present in all records.

[16] Display includes Journal Name, Volume, Issue, Pagination, and Publication Year. Includes publisher information for monographs/reports.

# CANCERLIT®

## SPECIAL FEATURES

For command descriptions, enter HELP LIMIT, HELP SORT, HELP RANK, HELP MAP, HELP DUP, HELP CURRENT online.

| | | |
|---|---|---|
| **LIMIT** | **/ABS** -- Abstract Present<br>**/ENG** -- English-Language Documents<br>**/HUMAN** -- Human Subject<br>**/MAJ** -- Major Descriptor<br>**/NOABS** -- No Abstract Present<br>**/NONENG** -- Non-English Language Documents<br>**/YYYY** -- Publication Year | S S3/ABS<br>S S2/ENG<br>S S1/HUMAN<br>S S5/MAJ<br>S S4/NOABS<br>S S6/NONENG<br>S S7/2000 |
| **SORT** | **AU, CS, JN, PY, TI** | SORT S3/ALL/AU<br>SORT S1/ALL/PY/D |
| **RANK** | All phrase- and numeric-indexed fields in the Additional Indexes can be ranked. Other RANK codes include: DE, ID | RANK AU S3<br>RANK DE S1 |
| **MAP** | CS, RN | MAP CS TEMP S1<br>MAP RN TEMP S2 |
| **RD, ID** | Remove duplicates (RD) or identify duplicates (ID,IDO). | RD S5 |
| **CURRENT** | Search only the most recent year plus one (CURRENT1) to five (CURRENT5) years. | B 159 CURRENT2 |

## PREDEFINED FORMAT OPTIONS

| NO. | DIALOGWEB FORMAT | RECORD CONTENT |
|---|---|---|
| 1 | -- | DIALOG Accession Number |
| 2 | -- | Full Record except Abstract |
| 3 | Medium | Bibliographic Citation |
| 4 | -- | Full Record with Tagged Fields[1] |
| 5 | -- | Full Record[1] |
| 6 | Free | Title and Publication Year |
| 7 | Long | Bibliographic Citation and Abstract[1] |
| 8 | Short | Title, Indexing and Publication Year |
| 9 | Full | Full Record[1] |
| K | -- | KWIC (Key Word In Context) displays a window of text; may be used alone or with other formats |

## OTHER OUTPUT OPTIONS

For an explanation, enter HELP TYPE, HELP UDF, HELP TAG online.

| | | |
|---|---|---|
| **USER DEFINED FORMATS** | User-defined formats may be specified using the display codes indicated in the Search Options tables. | TYPE S2/AU,TI/1-5<br>PRINT S1/TI,AB/ALL |
| **TAG** | TAG may be used for tagged fields. | TYPE S2/2/ALL TAG<br>PRINT S1/9/1-10 TAG |
| **DIRECT RECORD ACCESS** | DIALOG Accession Number | TYPE 03869010/5<br>DISPLAY 03870556/AU,TI<br>PRINT 03825646/9 |

## FOR ONLINE HELP:

See HELP FIELDS 159 for searchable fields; HELP FORMAT 159 for output formats; HELP LIMIT 159 for limits; HELP RATES 159 for cost information; HELP SORT 159 for sorts.