

ToxFile

FILE DESCRIPTION

ToxFile covers the toxicological, pharmacological, biochemical, and physiological effects of drugs and other chemicals: adverse drug reactions, chemically induced diseases, carcinogenesis, mutagenesis, teratogenesis, environmental pollution, waste disposal, radiation, and food contamination.

ToxFile includes toxicology records derived from MEDLINE (Dialog Files 154/155). These are journal citations related to toxicology, also called TOXBIB (or TOXLINE Core) records from the National Library of Medicine (NLM).

ToxFile also includes citations referred to as TOXNET (or TOXLINE Special) records from the following organizations and data repositories:

- Aneuploidy File (ANEUPL)
- International Labor Office (CIS)
- Toxicology Research Projects (CRISP)
- Developmental and Reproductive Toxicology (DART)
- Environmental Mutagen Information Center File (EMIC)
- Epidemiology Information System (EPIDEM)
- Environmental Teratology Information Center File (ETICBACK)
- Federal Research in Progress (FEDRIP)
- Health Aspects of Pesticides Abstract Bulletin (HAPAB)
- Toxicological Aspects of Environmental Health (HEEP)
- Hazardous Materials Technical Center File (HMTc)
- National Institute for Occupational Safety and Health (NIOSH)
- Toxicology Document and Data Repository (NTIS)
- Pesticides Abstracts (PESTAB)
- Poisonous Plants Bibliography (PPBIB)
- Swedish National Chemicals Inspectorate (RISKLINE)
- Toxic Substances Control Act Test Submissions (TSCATS)

ANEUPL, EMIC, EPIDEM, ETIC, FEDRIP, HAPAB, HMTc, PESTAB, PPBIB, and RISKLINE are archival subfiles (do not update). CIS, CRISP, DART, FEDRIP, NTIS, and TSCATS may update on an occasional or irregular basis. The combination of the toxicology journal citations extracted from MEDLINE and the additional data from these other sources greatly facilitates searching this subject area.

SOURCES

ToxFile includes toxicology-related material extracted from MEDLINE as well as journal articles, monographs, technical reports, theses, letters, meeting abstracts, research

projects from NLM-affiliated organizations.

SUBJECT COVERAGE

- Adverse Drug Reactions
- Air Pollution
- Animal Venom
- Antidotes
- Carcinogenesis via Chemicals
- Chemically Induced Diseases
- Drug Evaluation
- Environmental Pollution
- Food Contamination
- Mutagenesis
- Occupation
- Pesticides
- Radiation
- Teratogens
- Toxicology
- Waste Disposal

TIPS

USE THE (L) OPERATOR

to link descriptors and subheadings:

S SIGNAL TRANSDUCTION(L)IM

USE EXPLODE (!)

to search narrower descriptors in the MeSH vocabulary:

SELECT ADAPTIVE IMMUNITY!

USE THE ONLINE THESAURUS

to check and select MeSH thesaurus terms for TOXBIB records:

E (PLASMIN)

USE FREE-TEXT SEARCHING, not MESH

to search TOXNET records:

SELECT GREENHOUSE GASES

USE MAP RN

to take CAS® Registry Numbers to another file

USE LIMITS

e.g., /HUMAN to create a set of human subjects

DIALOG FILE DATA

Inclusive Dates: 1964 to the present

Update Frequency: Daily for Toxfile data

File Size: More than 3,000,000 records as of April 2010

CONTACT

TOXFILE is produced by Dialog based on material received from the U.S. National Library of Medicine. Questions concerning file content should be directed to:

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SAMPLE TOXBIB RECORD

DIALOG(R)File 156:ToxFile
(c) format only 2010 Dialog. All rts. reserv.

AA= 4583359 NLM Doc No: 16690014
 /TI Safety of incremental inhaled lipopolysaccharide challenge in humans.
 AU= Sundy John S; Wood William A; Watt Janet L; Kline Joel N; Schwartz David
 A
 CS= Department of Medicine, Duke University Medical Center, Durham, North
 Carolina 27710, USA. sundy001@mc.duke.edu
 JN=,CP=,PY=, SO=,SN=,JC= Journal Name: Journal of endotoxin research (England) Pub. Year: 2006
 12 (2) p113-9, ISSN: 0968-0519 -- Print Journal Code: 9433350
 CN= Contract/Grant No.: ES 11185; ES; NIEHS; ES 11375; ES; NIEHS; ES 12496;
 ES; NIEHS; ES005605; ES; NIEHS; ES07498; ES; NIEHS; RR00059; RR; NCRR
 NT= Publishing Model Print
 DT= Document type: Journal Article
 LA= Languages: ENGLISH
 OA= Main Citation Owner: NLM
 RT= Record type: MEDLINE; Completed
 SF= Subfile: Toxbib ; INDEX MEDICUS; Toxbib
 /AB BACKGROUND: Inhalation of environmental endotoxin is important in the
 pathogenesis of asthma and other environmental airway diseases. Inhaled
 airway challenge using lipopolysaccharide in humans has been performed for
 over 20 years to assess the airway response to endotoxin. However, there
 are no published data on the short-term safety of endotoxin inhalation
 protocols. OBJECTIVE: To characterize the safety and tolerability of
 incremental inhaled lipopolysaccharide challenge in humans. PATIENTS AND
 METHODS: We performed a retrospective analysis of data obtained from 119
 subjects who underwent inhaled challenge with up to 41.5 mug of
 lipopolysaccharide. We measured pulmonary function, temperature, mean
 arterial pressure, heart rate, and systemic symptoms for 3 h after
 challenge. RESULTS: Fever occurred in 30% of subjects and was associated
 with a higher cumulative dose of lipopolysaccharide. Reduced mean arterial
 pressure occurred in 21% of subjects and was dose-related. There was no
 association between fever or decreased mean arterial pressure and airway
 responsiveness to inhaled lipopolysaccharide. Common symptoms reported by
 subjects included: chills (64%), malaise (56%), cough (56%), chest
 tightness (49%), headache (43%), and myalgias (27%). None of the subjects
 experienced delayed discharge or a serious adverse event. CONCLUSIONS:
 Inhaled lipopolysaccharide causes dose-related systemic responses that
 include fever, reduced blood pressure, and constitutional symptoms that are
 not associated with the airway response to inhaled lipopolysaccharide.
 Systemic responses to inhaled lipopolysaccharide should be expected and
 subjects undergoing inhaled lipopolysaccharide challenge in the research
 setting should be carefully monitored for non-pulmonary adverse events for
 several hours after challenge.
 /GS Tags: Female; Male
 /DE Descriptors: *Lipopolysaccharides--toxicity--TO; Administration,
 Inhalation; Adolescent; Adult; Blood Pressure--drug effects--DE; Body
 Temperature--drug effects--DE; Dose-Response Relationship, Drug;
 Escherichia coli--chemistry--CH; Fever--chemically induced--CI; Fever
 --physiopathology--PP; Heart Rate--drug effects--DE; Humans;
 Lipopolysaccharides--administration and dosage--AD; Middle Aged; Research
 Support, N.I.H., Extramural; Research Support, U.S. Gov't, Non-P.H.S.;
 Respiratory Function Tests; Retrospective Studies
 /ID, RN= CAS Registry No.: 0 (Lipopolysaccharides)
 UP= Record Date Created: 20060512
 RC= Record Date Completed: 20060531

SAMPLE TOXNET RECORD

DIALOG(R)File 156:ToxFile
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AA= 694830 NLM Doc No: CRISP/2004/DK054507-07 Sec. Source ID:
AX= CRISP/2004/DK054507-07
/TI Cell Response To Iron Starvation & Intoxication in Yeast
AU= PHILPOTT CC
CS= carolina@intra.niddk.nih.gov, LIVER DISEASES SECTION, NIDDK, BETHESDA, MD
20892
SO= Source: Crisp Data Base National Institutes of Health
ZP= Zip Code: 20892
PY= Pub. Year: 2004
SP= Sponsoring Agency: U.S. DEPT. OF HEALTH AND HUMAN SERVICES; PUBLIC HEALTH
SERVICE; NATIONAL INSTITUTES OF HEALTH, NATIONAL INSTITUTE OF DIABETES AND
DIGESTIVE AND KIDNEY DISEASES
AW= Award Type: Intramural Project
DT= Document type: Research
LA= Languages: ENGLISH
RT= Record type: Completed
SF= Subfile: CRISP
/AB Iron is an essential nutrient for virtually every organism, yet it can
also be a potent cellular toxin. Dysregulated iron metabolism and iron
overload are features of a growing number of human diseases. Some genes
involved in cellular iron uptake and export have been identified, yet very
little is known about inter- and intracellular iron transport,
intracellular iron utilization, and the regulation of these processes. A
combination of genetic, biochemical, and cell biological approaches is
needed to understand iron metabolism and the role of iron in human disease.
These approaches can be combined in the simple eukaryote, *Saccharomyces*
cerevisiae. Studies of metal metabolism in budding yeast have yielded
important insights into iron, copper, and zinc metabolism in both humans
and pathogenic microorganisms. Genetic studies of iron metabolism in a
simple eukaryote will allow us to discover new genes involved in iron
homeostasis as well as to determine the cellular response to iron overload
and iron deprivation. We have used cDNA microarrays representing the entire
yeast genome to identify genes that are regulated according to the
availability of iron and the activity of Aft1p, the major iron-dependent
transcription factor. Using available genome and protein databases, we have
grouped these newly identified genes into families and have begun their
functional evaluation. We have identified and genetically characterized a
novel system of eukaryotic iron uptake. Four homologous genes regulated as
part of the Aft1-regulon (ARN1-4) were found to facilitate the transport of
siderophores. We have determined that, in the absence of transport
substrate, Arn1p is sorted directly from the Golgi to the late
endosome/pre-vacuolar compartment and does not cycle to the plasma
membrane.

(...)

Very little is known about heme transport in eukaryotes and no
fungal heme transporters have been identified. We have identified a gene
from *C. albicans* that, when overexpressed in *S. cerevisiae*, facilitates the
uptake of heme. This gene, tentatively termed HUF1 for heme utilization
factor 1, is part of a fungal gene family with three homologues in *C.*
albicans and, surprisingly, three orthologues in *S. cerevisiae*. These genes
have ten predicted transmembrane domains and may function as transporters.
Members of this family of genes serve an essential function in yeast, as
deletion of two members of this family is lethal in *S. cerevisiae*. We have
constructed a double deletion strain in *S. cerevisiae* that expresses Huf1p
from a regulatable promoter, and we are phenotypically characterizing this
strain. Localization studies with an epitope-tagged Huf1p and a screen for
genes that rescue the growth defects of the double deletion mutant are
underway.

/ID Identifiers: glutamate ammonia ligase; intracellular transport;
Saccharomyces cerevisiae; genetic regulation; transcription factor; fungal
genetics; gene deletion mutation; iron poisoning; iron metabolism;
siderophore; protein localization; genetic screening; protein protein
interaction; microarray technology
UP= Record Date Created: 200412

File 156
SEARCH OPTIONS

ToxFile

BASIC INDEX

SEARCH SUFFIX	DISPLAY CODE	FIELD NAME	INDEXING	SELECT EXAMPLES
—	—	All Basic Index Fields	Word	S COSMIC(W)RADIATION
/AB	AB	Abstract ¹	Word	S ENVIRONMENTAL(W)ENDOTOXIN?/AB
/DE	DE	Descriptor ²	Phrase	S LINEAR ENERGY TRANSFER/DE
/GS	GS	Check Tag ³	Phrase	S COMPARATIVE STUDY/GS
/ID	ID	Identifier ^{4,5}	Phrase	S POLYETHYLENE GLYCOLS/ID
/NM	NM	Named Person	Word & Phrase	S WARKANY/NM S WARKANY JOSEPH/NM
/TI	TI	Title	Word	S SAFETY(1W)LIPOPOLYSACCHARIDE/TI

¹ Abstracts are present for more than 70% of records.

² Also /DE*, /DF, /DF*. Most OLDMEDLINE records (with publication dates of 1951-1965) have at least one MeSH term.

³ As of 2006, the only remaining Check Tags are: Male and Female.

⁴ Also /IF. CAS Registry Number, Enzyme Commission Number, Gene Symbol, Enzyme Name, and Chemical Name display in /ID.

⁵ Chemical Names and Enzyme Names are searchable in /ID. CAS Registry Numbers and Enzyme Commission Numbers are searchable in RN= and EC=, respectively, and the display includes the chemical and enzyme names in parentheses.

ADDITIONAL INDEXES

SEARCH PREFIX	DISPLAY CODE	FIELD NAME	INDEXING	SELECT EXAMPLES
AA=	AA	NLM Document Number	Phrase	S AA=16690014
—	AN	DIALOG Accession Number		
AU=	AU	Author	Phrase	S AU=SUNDY JOHN?
AW=	AW	Award Type ⁶	Phrase	S AW=INTRAMURAL PROJECT
AX=	AX	Secondary Source ID ⁶	Phrase	S AX="CRISP/2004/DK054507-07"
BN=	BN	International Standard Book Number (ISBN) ⁶	Phrase	S BN=0-08-042975-0
CC=	CC	Classification ⁶	Word & Phrase	S CC=TSCA S CC="TSCA SECT. FYI REC 12/31/91"
CD=	CD	Coden ⁶	Phrase	S CD=AACHA
CN=	CN	Contract Number	Phrase	S CN=ES 11185
CP=	CP	Country of Publication	Phrase	S CP=ENGLAND
CS=	CS	Corporate Source ⁷	Word & Phrase	S CS=(MEDICINE(S) DUKE(W)UNIVER?) S CS=LIVER DISEASES?
DC=	—	MeSH Descriptor Code ⁸	Phrase	S DC=H1.671.579.404.467.?
DT=	DT	Document Type	Phrase	S DT=JOURNAL ARTICLE
EC=	EC	Enzyme Commission Number ^{4,5}	Phrase	S EC=2.5.1.18
FD=	FD	Project Final Date ⁶	Phrase	S FD=20060831
JC=	JC	NLM Journal Code	Phrase	S JC=9433350
JN=	JN	Journal Name ⁹	Phrase	S JN=JOURNAL OF ENDOTOXIN?
LA=	LA	Language	Phrase	S LA=ENGLISH
MI=	MI	Mission Name ¹⁰	Phrase	S MI=FLIGHT EXPERIMENT
NT=	NT	Notes/Comments ¹¹	Word	S NT=(COMMENT AND LANCET)
OA=	OA	Main Citation Owner ¹⁰	Phrase	S OA=NLM
OB=	OB	Other Citation Owner ¹⁰	Phrase	S OB=NASA
OC=	OC	Abstract Source ¹⁰	Phrase	S OC=KIE
—	OR	Order Number ⁶		
—	PR	Price ⁶		
PY=	PY	Publication Year	Phrase	S PY=2006
RC=	RC	Record Completed Date	Phrase	S RC=20060531
—	RF	Number of References		
RI=	RI	Record Identifier ¹⁰	Phrase	S RI=00027236
RN=	RN	CAS(r) Registry Number ^{4,5}	Phrase	S RN=25656-90-0
RT=	RT	Record Type	Phrase	S RT=COMPLETED
SD=	SD	Project Start Date ⁶	Phrase	S SD=20020401
SF=	SF	Subfile	Phrase	S SF=TOXBIB
SN=	SN	International Standard Serial Number (ISSN)	Phrase	S SN=0968-0519
SO=	SO	Source Information ¹²	Word	S SO=(JOURNAL(1W)ENDOTOXIN AND 2)
SP=	SP	Sponsoring Agency ⁶	Phrase	S SP=PUBLIC HEALTH SERVICE?
SQ=	SQ	Molecular Sequence Databank Number ^{10,13}	Word & Phrase	S SQ=(GENBANK(W)AA273731) S SQ=GENBANK AA273731?
ST=	ST	City or State ⁶	Phrase	S ST=ILLINOIS
UD=	—	Update	Phrase	S UD=9999
UP=	UP	Record Date Created	Phrase	S UP=200412
ZP=	ZP	Zip Code ⁶	Phrase	S ZP=20892

⁶ Present in TOXNET records only.⁷ Beginning in 1988.⁸ You can EXPLODE either the Descriptor Code followed by a question mark (S DC=A4.411.?) or the Descriptor Name followed by an exclamation point (e.g., S LUNGI!). Descriptor Codes do not display in records.⁹ Journal Names are searchable as the full name and the abbreviated name, displayable as the full name.¹⁰ Present in TOXBIB records only.¹¹ Beginning in 1989.¹² Search and display for TOXBIB records include Journal Name, Volume, Issue, Pagination, and Publication Year. For TOXNET records, all elements of this field should be searched separately; display depends on document type and subfile.¹³ Beginning in 1996.

SPECIAL FEATURES

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

LIMIT	/ABS -- Abstract Present /ENG -- English-Language Records ¹⁴ /HUMAN -- Human /MAJ -- Major Descriptor /NOABS -- No Abstract Present /NONENG -- Non-English Language Records /YYYY -- Publication Year	S S1/ABS S SF=CIS/ENG S S2/HUMAN S LIPOPOLYSACCHARIDES/MAJ S DT=RESEARCH/NOABS S S3/NONENG S S4/2006
SORT	AU, CS, JN, PY, TI	SORT S3/ALL/AU 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, SQ	RANK AU S3 RANK DE
MAP	DE, RN	MAP RN TEMP S2
RD, ID	Remove duplicates (RD) or identify duplicates (ID,IDO).	RD S5

¹⁴ Searches LIMITED to /ENG will also include records with LA=UNSPECIFIED.

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
5	--	Full Record
6	Short	Title and Publication Year
7	Long	Bibliographic Citation and Abstract
8	Free	Title, Indexing, and Publication Year
9	Full	Full Record
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	Output may be specified using the display codes indicated in the Search Options tables.	TYPE S2/AU,TI,SO/1-5 PRINT S1/AU,TI,AB/ALL
TAG	TAG may be used for tagged fields.	TYPE S2/5/1-5 TAG PRINT S1/9/ALL TAG DISPLAY S3/7/ALL TAG
DIRECT RECORD ACCESS	DIALOG Accession Number	TYPE 03905436/9 DISPLAY 03905436/5 PRINT 03905436/4

FOR ONLINE HELP:

See HELP FIELDS 156 for searchable fields; HELP FORMAT 156 for output formats; HELP LIMIT 156 for limits; HELP RATES 156 for cost information; HELP SORT 156 for sorts.