A

TExAs Human Tissue-specific Exposome Atlas

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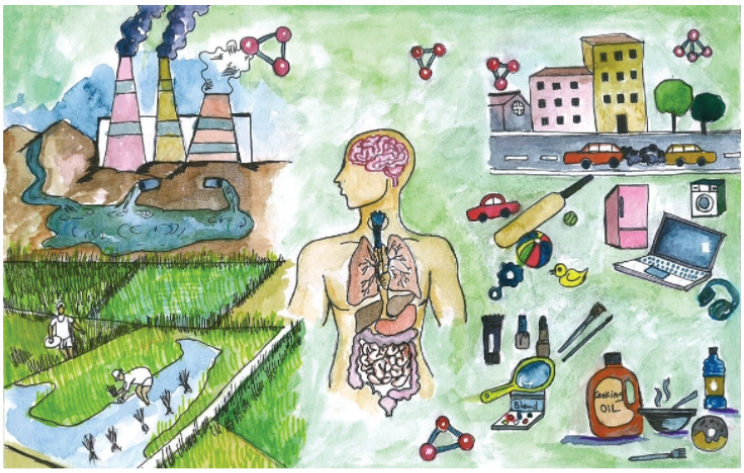

Humans are exposed to a variety of chemicals from birth, throughout their lives. Both endogenous and exogenous chemicals can affect our biological processes. There has been an increase in the usage of chemicals in various household and industrial applications. These environmental chemicals, constituting the external exposome, have been associated with a significant disease burden. Preventing exposure to hazardous chemicals in the external exposome, and mitigating the effects of such exposure, will require a clear understanding of the effects of these chemicals on the body. In order to characterize the external exposome and its effects, we compile tissue-specific chemical exposure data into this resource, Human Tissue-specific Exposome Atlas (TExAs). The chemicals in TExAs have further been integrated with potential gene targets and possible disease associations.

TExAs compiles 380 environmental chemicals detected across 27 human tissues. The chemicals are compiled from three resources that provide tissue-specific data from exposure studies - CTD, Exposome Explorer and PubChem. The chemicals from these resources have been filtered to retain only those that have been detected in

B

SIMPLE SEARCH

Chemical name — For example: 'Bisphenol A'

Chemical identifier (PubChem or CAS) — For example: '319-85-7' or '3036'

Search

PHYSICOCHEMICAL FILTER

Molecular Weight — Choose here

LogP — Choose here

TPSA — Choose here

Hydrogen bond acceptors (HBA) — Choose here

Hydrogen bond donors (HBD) — Choose here

Heavy atoms — Choose here

Rotatable bonds — Choose here

C

BROWSE

ENVIRONMENTAL CHEMICALS BY

CHEMICAL NAME

Chemical name — Choose here

Browse

(OR)

PRESENCE IN HUMAN TISSUE

Human tissue — Choose here

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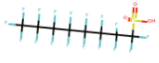
D

Perfluorooctanesulfonic acid

Identification | Tissue-specific exposome | Chemical-gene interaction | Chemical-disease association | Presence in chemical regulation or guideline | High Production Volume



Download structure:

2D: MOL MOL2 SDF

3D: MOL MOL2 SDF PDB PDBQT

Chemical identification	
Pubchem identifier	74483
CAS identifier	1763-23-1
IUPAC name	Perfluorooctanesulfonic acid
SMILES	C(C(C(C(C(F)(F)S(=O)(=O)O)(F)F)(F)F)(F)F)(C(C(C(F)(F)F)(F)F)(F)F)(F)F
InChI	InChI=1S/C8HF17O3S/c9-1(10,3(13,14)5(17,18)7(21,22)23)2(11,12)4(15,16)6(19,20)8(24,25)29(26,27)28/h(H,26,27,28)
InChIKey	YFSUTJLHUFNCNZ-UHFFFAOYSA-N

Chemical classification	