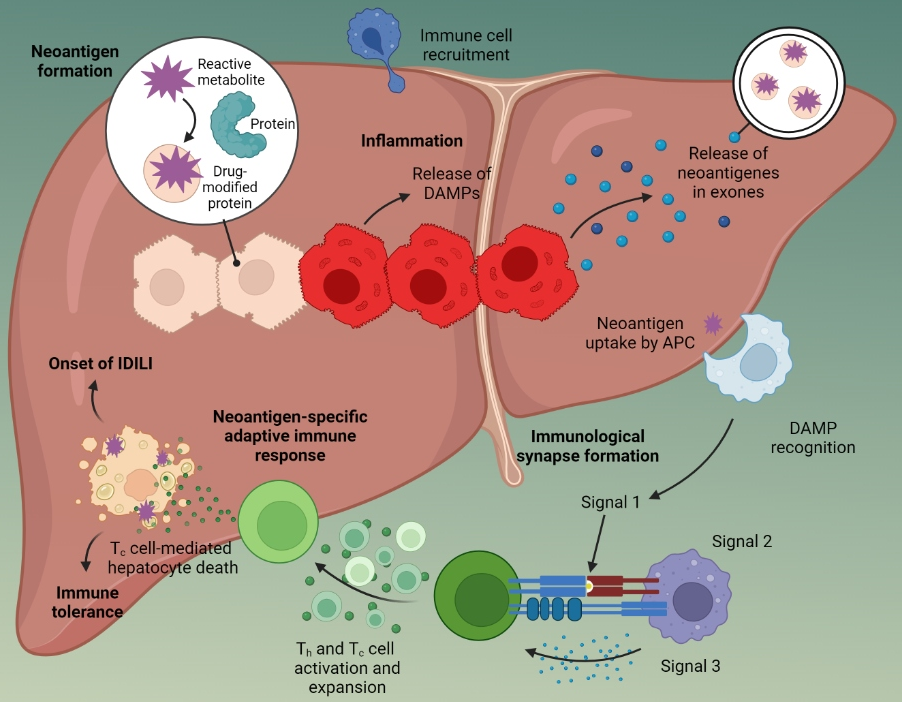
EBCL-0030

Most-DILI-Concern Drugs

DILI (Drug-Induced Liver Injury) is liver damage or injury caused by the use of pharmaceutical drugs or medications. DILI can manifest in various forms, ranging from mild elevations in liver enzymes to severe liver failure. The severity of DILI can vary widely from person to person and depends on the individual's genetics and health, and the drug involved. Healthcare providers and researchers closely monitor the capability of drugs to cause DILI, and regulatory agencies have established guidelines for assessing and mitigating this risk during drug development. Understanding and managing DILI is crucial to ensuring the safety of pharmaceuticals and protecting patients from harm.

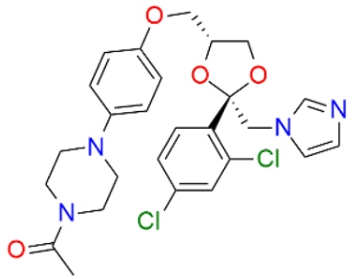
The **Library of Most-DILI-Concern Drugs** comprises a selection of pharmaceutical compounds known for their potential to induce liver injury in patients. These drugs have been extensively studied and documented for their hepatotoxic effects. Researchers and healthcare professionals can use this library for in-depth investigations into DILI mechanisms, risk factors, and possible mitigation strategies. It serves as a valuable resource for advancing our understanding of liver-related adverse drug reactions and improving drug safety profiles.



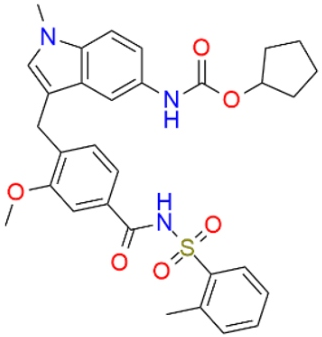
Mechanism of drug-induced liver injury *(Created by BioRender.com)*

Related terms: *H1 receptor, D2 receptor, carbonic anhydrase, acetylcholinesterase, COX-1, epidermal growth factor receptor, D3 receptor.*

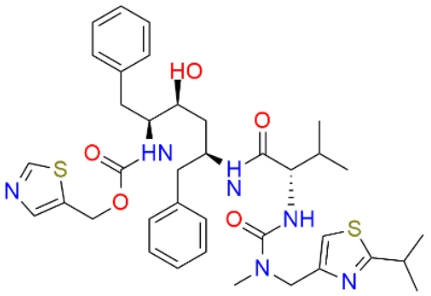
Highlights



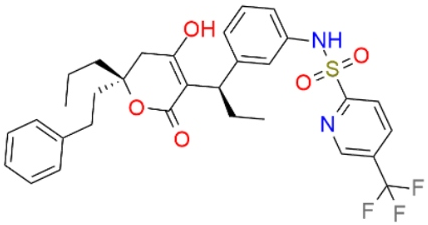
EBC-06116
CAS: 65277-42-1
Ketoconazole is an anti-fungal agent, a CYP3A4 and CYP24A1 inhibitor.



EBC-11230
CAS: 107753-78-6
Zafirlukast is a leukotriene receptor antagonist used for treatment of asthma.



EBC-27374
CAS: 174484-41-4
Tipranavir is a protease inhibitor used to treat HIV-1.



EBC-06098
CAS: 155213-67-5
Ritonavir is an inhibitor of HIV protease and Cytochrome P450, used to treat HIV infection and AIDS.

Library Composition

Name	Occurrence in the library, times
Wnt signaling pathway	9
Steroid hormone receptors	6
G protein-coupled receptors	6
Receptor tyrosine kinases (RTKs)	6
Potassium channels	5
Eicosanoid turnover	4
CD molecules	2
RAF family	2
Chromatin modifying enzymes	2
Catecholamine turnover	2
Nuclear hormone receptors	2

DNA topoisomerases	2
Cytochrome P450	2
HIV-1 retropepsin	2
Thyroid hormone turnover	2
Carbonic anhydrases	2
Threonine (T) Peptidases	1
Catalytic receptors	1
Ligand-gated ion channels	1
Voltage-gated ion channels	1
P-type ATPases	1
Human endogenous retrovirus (HERV) proteins	1
Other antimicrobial targets	1
enoyl-[acyl-carrier-protein] reductase	1

Protein kinase C (PKC) family	-	1
Metallo (M) Peptidases	-	1
Integrase	-	1
Peptidylprolyl isomerase	-	1
SLC22 family of organic cation and anion transporters	-	1
Oxidoreductases	-	1
Adenosine turnover	-	1
Hydrolases	-	1
Aldose reductase	-	1