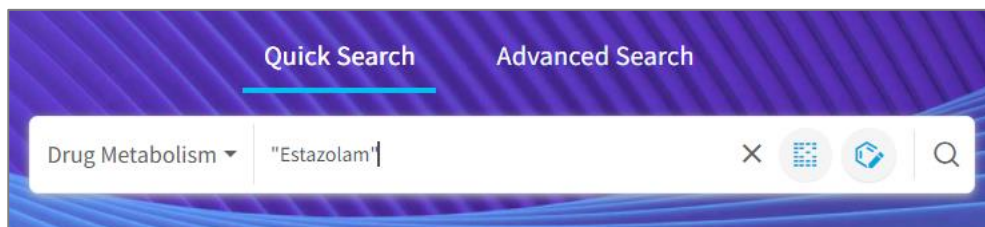


Understanding the metabolism around your drug



Cortellis Drug Discovery Intelligence

Easily identify enzymes responsible for the metabolism of your drug and visualize breakdown products with the new Drug Metabolism knowledge area.

1. Run a quick search in **Drug Metabolism** for your drug of interest, for example Estazolam, used for insomnia treatment:



2. The results page will show all indexed metabolic reactions associated to your drug and intermediates:

Drug Metabolism										
<div> <div>Apply Filter</div> <div>Sorted by relevance</div> <div>Expand all</div> </div> <div>Showing 1-15 of 15 Drug Metabolism records for "Estazolam"</div>										
1	Substrate	Metabolite	EC Number	Enzyme	Reaction Type	Species	Tissues	Go to Network Reactions	Literature	View Network
<input type="checkbox"/>	Estazolam	3-Hydroxybenzodiazepinyl-estazolam	1.14.14.1	CYP3A4	aliphatic hydroxylation	Canis lupus familiaris Homo sapiens Rattus norvegicus	Liver	15	2	4 
<input type="checkbox"/>	Estazolam	3-Oxatriazolyl-estazolam	1.14.14.1		aromatic hydroxylation	Canis lupus familiaris Homo sapiens Rattus norvegicus	Blood Urine	15	1	

1. Use Apply Filters to refine your results, for instance by **Species**, **Enzyme** or **Tissue**:

Apply Filters
×

Substrate	>
Metabolite	>
Enzyme	>
Tissue	>
Species	>

2. Expand all metabolic interaction records to see the **sources** used to curate each record, as well as insights on the **experimental details**:

Reaction: Estazolam + H⁽⁺⁾ + NAD(P)H + O_(,2) = NADP⁽⁺⁾ + 3-Hydroxybenzodiazepinyl-estazolam + H_(,2)O

Enzyme / EC Number	Source	Summary	Species	Tissue / Method
CYP3A4	Xenobiotica (2005)	In vitro metabolism of estazolam was studied in humans using liver microsomes. 3-Hydroxybenzodiazepinyl-estazolam (4-hydroxyestazolam) was formed from estazolam...	Homo sapiens	Liver - high-performance liquid chromatography
	Xenobiotica (1974)	In vivo metabolism of estazolam was studied in dogs. 3-Hydroxybenzodiazepinyl-estazolam (metabolite IV) was formed from estazolam by hydroxylation at 3rd position...	Canis lupus familiaris	Blood - gas-liquid chromatography

Click to see the **citation** and related information

Identification of human cytochrome P450 enzymes involved in the formation of 4-hydroxyestazolam from estazolam.

Miura M; Otani K; Ohkubo T

Xenobiotica 2005, 35(5): 455

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PubMed * OpenURL Full Text

3. Easily identify the **enzyme/s** behind each metabolic reaction, as well as their **EC Number**. You can also quickly navigate to enzyme records or the list of enzymes with the same EC Number by clicking on them:

Enzyme
CYP3A4

cytochrome P450 family 3 subfamily A member 4

Record
Conditions
Therapies
Gene Variants
Multimedia

General Information

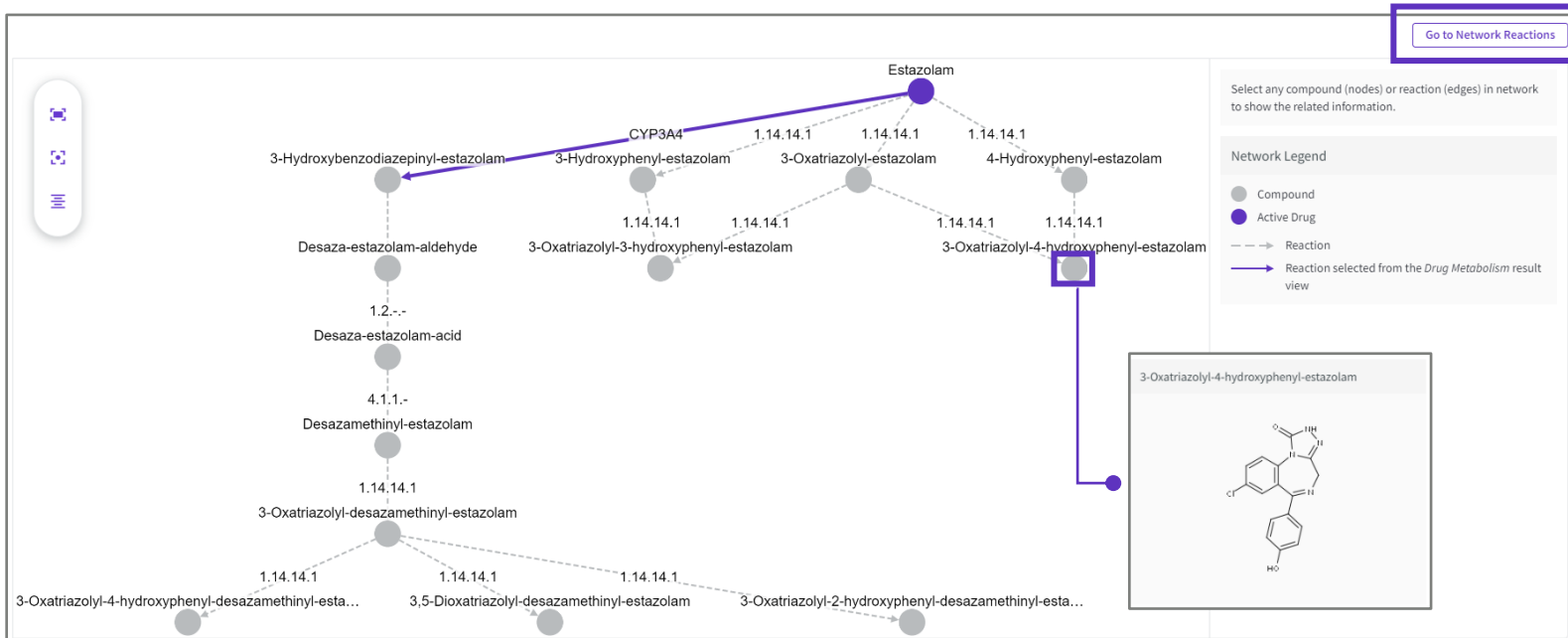
Name	cytochrome P450 family 3 subfamily A member 4
Gene Symbol	CYP3A4
Synonyms	1,4-cineole 2-exo-monoxygenase 1,8-cineole 2-exo-monoxygenase Albendazole monoxygenase albendazole monoxygenase <a>Show 55 more
Organism	Homo sapiens (human)
Mechanisms	CYP3A4 Expression Inhibitors Cytochrome P450 3A4 (CYP3A4) Inhibitors
Biological Process	alkaloid catabolic process androgen metabolic process drug catabolic process drug metabolic process <a>Show 34 more

Related Content

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- Genes & Targets 1

Tip Click to get a list of inhibitors for CYP3A4, which could potentially increase estazolam exposure and lead to adverse events.

- See the full metabolic network. Explore the structure of each compound by clicking on it, or pull the full list of reactions within the network by clicking on **Go to Network Reactions**:



For more information contact Customer Service at [LS Product Support](#).