abcam

Product datasheet

Clotrimazole, Non-selective P450 cytochrome inhibitor ab120744

2 Images

Overview

Product name Clotrimazole, Non-selective P450 cytochrome inhibitor

Description Non-selective P450 cytochrome inhibitor

Biological description Non-selective P450 cytochrome inhibitor ($K_i = 0.02-67 \mu M$ for P450 cytochrome subtypes).

Potent inhibitor of 34A (K_i = 20 nM). Antifungal agent.

Purity > 99%

CAS Number 23593-75-1

Chemical structure

Properties

Chemical name 1-(2-Chloro-α,α-diphenylbenzyl)imidazole

Molecular weight 344.84

Molecular formula $C_{22}H_{17}CIN_2$

Storage instructions Store at Room Temperature. The product can be stored for up to 12 months.

Solubility overview Soluble in DMSO to 75 mM and in ethanol to 100 mM

Handling Wherever possible, you should prepare and use solutions on the same day. However, if you need

to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and

prior to opening the vial we recommend that you allow your product to equilibrate to room

temperature for at least 1 hour.

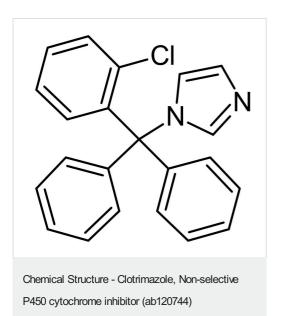
Toxic, refer to SDS for further information.

Need more advice on solubility, usage and handling? Please visit our frequently asked

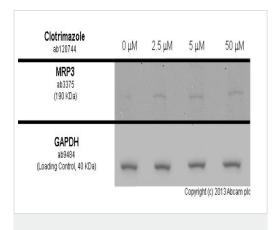
questions (FAQ) page for more details.

Source Synthetic

Images



2D chemical structure image of ab120744, Clotrimazole, Non-selective P450 cytochrome inhibitor



Functional Studies - Clotrimazole, Non-selective P450 cytochrome inhibitor (ab120744) HepG2 cells were incubated at 37° C for 24h with vehicle control (0 μ M) and different concentrations of clotrimazole (ab120744)in DMSO. Increased expression of MRP3 (ab3375) correlates with an increase in clotrimazole concentration, as described in literature.

Whole cell lysates were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 20 μ g of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 3% milk before being incubated with <u>ab3375</u> at 1/50 dilution and <u>ab9484</u> at 1 μ g /ml overnight at 4°C. Antibody binding was detected using an anti-mouse antibody conjugated to HRP (<u>ab97040</u>) at 1/10000 dilution and visualised using ECL development solution.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

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