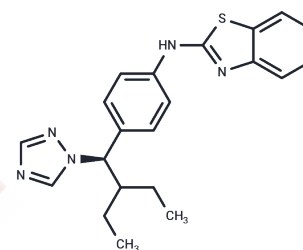


Talarozole (R enantiomer)

Chemical Properties

CAS No. :	870093-23-5
Formula:	C ₂₁ H ₂₃ N ₅ S
Molecular Weight:	377.51
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Talarozole R enantiomer is a potent and selective inhibitor of cytochrome P450 26-mediated degradation of endogenous all-trans retinoic acid.
Targets(IC50)	Others,Cytochromes P450
In vitro	Talarozole R enantiomer treatment increased the mRNA expression of CRABP2, KRT4, CYP26A1, and CYP26B1 dose-dependently, and decreased the expression of KRT2 and IL-1alpha compared with vehicle-treated skin. No mRNA change in retinol-metabolizing enzymes was obtained. There was no induction of epidermal thickness or overt skin inflammation in talarozole-treated skin. Immunofluorescence analysis confirmed the upregulation of KRT4 protein, but no upregulation of CYP26A1 and CYP26B1 expression was detected [1] [2].
In vivo	Talarozole R enantiomer slightly diffused into the skin only when dissolved in propylene glycol, isopropyl myristate, or ethanol. Although only 0.1% of the dose applied was found in the skin itself after 12-24 h, this was sufficient to achieve local concentrations well above the half-maximal inhibitory concentration value for talarozole. The distribution of talarozole within the skin was investigated: 80% was located in the epidermis, while the remaining 20% was found in the dermis [3].

Solubility Information

Solubility	DMSO: 51 mg/mL (135.1 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6489 mL	13.2447 mL	26.4894 mL
5 mM	0.5298 mL	2.6489 mL	5.2979 mL
10 mM	0.2649 mL	1.3245 mL	2.6489 mL
50 mM	0.053 mL	0.2649 mL	0.5298 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Pavez Loriè E, Cools M, Borgers M, Topical treatment with CYP26 inhibitor talarozole (R115866) dose dependently alters the expression of retinoid-regulated genes in normal human epidermis. *Br J Dermatol.* 2009 Jan;160(1):26-36

Geria AN, Scheinfeld NS. Talarozole, a selective inhibitor of P450-mediated all-trans retinoic acid for the treatment of psoriasis and acne. *Curr Opin Investig Drugs.* 2008 Nov;9(11):1228-37.

Baert B, De Spiegeleer B. Local skin pharmacokinetics of talarozole, a new retinoic acid metabolism-blocking agent. *Skin Pharmacol Physiol.* 2011;24(3):151-9.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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