**Chemical Properties**

**Product Name:** Talarozole  
**Cas No.:** 201410-53-9  
**M.Wt:** 377.51  
**Formula:** C21H23N5S  
**Synonyms:** Rambazole; R115866; R-115866; R 115866  
**Chemical Name:** N-[4-[2-ethyl-1-(1,2,4-triazol-1-yl)butyl]phenyl]-1,3-benzothiazol-2-amine  
**Canonical SMILES:** CCC(CC)(C1=CC=C(C=C1)NC2=NC3=CC=CC=C3S2)N4C=NC=N4  
**Solubility:** Soluble in DMSO  
**Storage:** Store at -20°C  
**General tips:** For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.  
**Shopping Condition:** Evaluation sample solution: ship with blue ice  
All other available size: ship with RT, or blue ice upon request

**Biological Activity**

**Targets:** Others  
**Pathways:** RARs  
**Description:** Talarozole is a selective inhibitor of cytochrome P450 with an IC50 at 4 nM [1]. Cytochrome P450 is concerned with oxidative metabolism of many organic chemicals of diverse structure, both in exogenous and endogenous environment. Cytochrome P450 are notable both for the diversity of reactions that they catalyze and the range of chemically dissimilar substrates upon which they act.
Talarozole is a potent and selective inhibitor of cytochrome P450 26-mediated breakdown of endogenous all-trans-retinoic acid for the treatment of psoriasis and acne. Talarozole treatment increased the mRNA expression of CRABP2, KRT4, CYP26A1 and CYP26B1 dose, meanwhile, compared with vehicle-treated skin, decreased the expression of KRT2 and IL-1α. There was no mRNA change in retinol-metabolizing enzymes. No induction of epidermal thickness or overt skin inflammation in talarozole-treated skin. Immunofluorescence analysis substantiated an upregulation of KRT4 protein, however, there were no upregulation of CYP26B1 and CYP26A1 expression was found.[1, 2]

There were 0.1% of the dose found in the skin itself after 12-24 h. The results of distribution of talarozole within the skin show that 80% was located in the epidermis, meanwhile, the remaining 20% was detected in the dermis. [3]

Reference:

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.