**Product Data Sheet**

### Chemical Properties

**Product Name:** CD 437  
**Cas No.:** 125316-60-1  
**M.Wt:** 398.5  
**Formula:** C27H26O3  
**Synonyms:** CD437  
**Chemical Name:** 6-((3-((1s,3R,5S,7s)-adamantan-1-yl)-4-hydroxyphenyl)-2-naphthoic acid  
**Canonical SMILES:** OC1=CC=C(C2=CC=C3C(C=O)=O)=C3=C2)C=C1[[@]4(C[[@]H][S6)]C[[@]H]6[C[H](C5)C4  
**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:**  
CD 437 is a selective agonist of RARγ [1]. Retinoic acid receptor gamma (RAR-γ) is a nuclear receptor that is activated by 9-cis retinoic acid and all-trans retinoic acid. RAR-γ also functions as a transcription factor. CD 437 is a selective RARγ agonist. In tumor cells, CD437 induced RAR-γ-dependent differentiation and apoptosis. Also, CD437 induced DNA adduct formation and p53-independent
DNA damage response [1]. In DU145 human prostate cancer cells, CD437 rapidly reduced IκBα and increased nuclear translocation of the NF-κB subunit p65. Also, CD437 increased the DNA-binding activity of NF-κB and induced DR4 expression and apoptosis [2]. In human melanoma A375 cells, CD437 induced apoptosis, which was mediated by the activation of NF-κB and RIG-I (retinoic acid inducible gene I) pathway [3]. In human osteosarcoma cells, CD437 activated c-Jun N-terminal kinase 1 (JNK1) through the upregulation of thioredoxin-binding protein 2 (TBP2) and induced apoptosis. Also, CD437 induced TBP2 mRNA expression by recruitment of ETS1 transcription factor [4].

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.