

Small Molecules

CD437

Retinoid pathway activator; Activates retinoic acid receptor (RAR)

Catalog # 72722
72724

5 mg
25 mg



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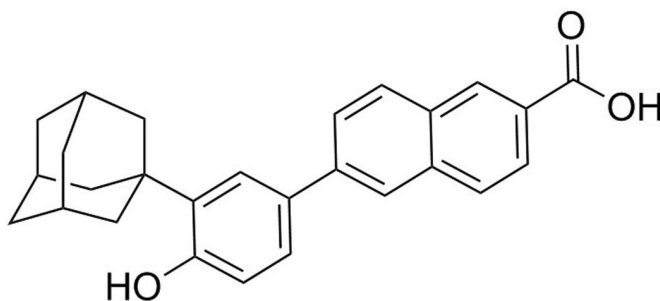
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Product Description

CD437 is the prototypical adamantyl arotinoid of the retinoid-related molecule family that acts as a selective agonist of retinoic acid receptor (RAR) γ ($K_d = 6.5 \mu\text{M}$, $2.5 \mu\text{M}$, and 77 nM for RAR α , β , and γ , respectively; Bernard et al.; Pérez-Rodríguez et al.).

Molecular Name:	CD437
Alternative Names:	AHPN
CAS Number:	125316-60-1
Chemical Formula:	$\text{C}_{27}\text{H}_{26}\text{O}_3$
Molecular Weight:	398.5 g/mol
Purity:	$\geq 95\%$
Chemical Name:	6-(4-Hydroxy-3-tricyclo[3.3.1.1.13,7]dec-1-ylphenyl)-2-naphthalenecarboxylic acid
Structure:	



Properties

Physical Appearance:	A crystalline solid
Storage:	Product stable at -20°C as supplied. Protect from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com.
Solubility:	<ul style="list-style-type: none">· Absolute ethanol $\leq 2.5 \text{ mM}$· DMSO $\leq 40 \text{ mM}$ For example, to prepare a 10 mM stock solution in DMSO, resuspend 1 mg in 251 μL of DMSO.

Prepare stock solution fresh before use. Information regarding stability of small molecules in solution has rarely been reported, however, as a general guide we recommend storage in DMSO at -20°C . Aliquot into working volumes to avoid repeated freeze-thaw cycles. The effect of storage of stock solution on compound performance should be tested for each application.

Compound has low solubility in aqueous media. For use as a cell culture supplement, stock solution should be diluted into culture medium immediately before use. Avoid final DMSO concentration above 0.1% due to potential cell toxicity.

Published Applications

REPROGRAMMING

- Increases speed and number of pre-induced pluripotent stem (iPS) cell colonies generated from mouse embryonic fibroblasts (MEFs) transfected with Oct4, Sox2, c-Myc, and Klf4 (Wang et al.).

CANCER RESEARCH

- Induces cell cycle arrest and apoptosis in a variety of cancer cells, including melanoma, breast, lung, and prostate cancer cells (Fontana and Rishi; Jin et al.; Li et al.; Valli et al.).
- Decreases mRNA expression of squamous differentiation markers cytokeratin 1, involucrin, and SPR1 in the human head and neck squamous cell carcinoma cell line, UMSCC22B (Sun et al.).

References

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Related Small Molecules

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