## Data Sheet

## Product Name:

Cat. No.:
CAS No.:
Molecular Formula:
Molecular Weight:
Target:
Pathway:
Solubility:

CD2665
CS-0028470
170355-78-9
$\mathrm{C}_{31} \mathrm{H}_{34} \mathrm{O}_{5}$
486.60

RAR/RXR
Metabolic Enzyme/Protease
10 mM in DMSO


## BIOLOGICAL ACTIVITY:

CD2665 is an orally active and selective RAR- $\beta, \boldsymbol{\gamma}$ antagonist, with $\mathbf{K}_{\boldsymbol{d}}$ values of $306 \mathrm{nM}, 110 \mathrm{nM}$ for RAR- $\beta$ and RAR- $\gamma$, repectively ${ }^{[1]}$ ${ }^{[3] .}$ IC50 \& Target: Ki: 110 nM (RARY), 306 nM (RARB) ${ }^{[1]}$ In Vitro: CD2665 (100 nM; 9 days; 3 T3 cells) has significant effects on cell growth and differentiation ${ }^{[1]}$. In Vivo: CD2665 ( $0.6 \mathrm{mg} / \mathrm{kg}$; Subcutaneous injection; daily, for 22 days) completely inhibits the overexpression of RAR $\beta$ mRNA in the brain of alcohol treated mice ${ }^{[2]}$.
CD2665 is a selective retinoid antagonist and elicits the expected maturation delay and growth plate expansion ${ }^{[3]}$.

## References:

[1]. Kim MJ, et al. The role of specific retinoid receptors in sebocyte growth and differentiation in culture. J Invest Dermatol. 2000 Feb;114(2):349-53.
[2]. Alfos S, Boucheron C, et al. A retinoic acid receptor antagonist suppresses brain retinoic acid receptor overexpression and reverses a working memory deficit induced by chronic ethanol consumption in mice. Alcohol Clin Exp Res. 2001 Oct;25(10):1506-14.
[3]. Koyama E, et al.Premature Growth Plate Closure Caused by a Hedgehog Cancer Drug Is Preventable by Co-Administration of a Retinoid Antagonist in Mice. J Bone Miner Res. 2021 Jul;36(7):1387-1402.

## CAIndexNames:

Benzoic acid, 4-[6-[(2-methoxyethoxy)methoxy]-7-tricyclo[3.3.1.13,7]dec-1-yl-2-naphthalenyl]-

SMILES:
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Caution: Product has not been fully validated for medical applications. For research use only.
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