Data Sheet

Cyclopamine-KAAD - Calbiochem

Note that this data sheet is not lot-specific and is representative of the current specifications for this product. Please consult the vial label and the certificate of analysis for information on specific lots. Also note that shipping conditions may differ from storage conditions.

Revision	23-October-2024 JSW
Synonyms	3-Keto-N-(aminoethyl-aminocaproyl-dihydrocinnamoyl)cyclopamine, KAAD-Cyclopamine, Shh Signaling Antagonist II
Description	A cell-permeable potent analog of Cyclopamine (Cat. No. 239803) that specifically inhibits Hedgehog (Hh) signaling with similar or lower toxicity (IC_{50} = 20 nM in Shh-LIGHT2 assay; 50 nM in $p2^{Ptch-/-}$cells; 500 nM in SmoA1-LIGHT cells). Binds to SmoA1 and promotes its exit from the endoplasmic reticulum. Suppresses both ShhNp-induced pathway activity and SmoA1-induced reporter activity. Reported to cause regression of murine tumor allografts in vivo and induce rapid cell death in human medulloblastoma. Shown to sensitize human glioma cells to TRAIL-induced apoptosis.
Form	White to light yellow solid
Inert gas	Packaged under inert gas
Chemical formula	$C_{44}H_{63}N_3O_4$
Purity	70% by HPLC (sum of two isomers)
Solubility	DMSO (5 mg/ml), Ethanol (1 mg/ml), or Methanol (1 mg/ml)
Storage	Protect from light -20°C
Do Not Freeze	Ok to freeze
Special Instructions	Following reconstitution, aliquot and freeze (-20°C). Stock solutions are stable for up to 2 weeks at -20°C.
Toxicity	Harmful
References	Siegelin, M.D. et al. 2009. Neurobiol. Dis. 34, 259. Watkins, D.N., et al. 2003. Nature 422, 313. Berman, D.M., et al. 2002. Science 297, 1559. Chen, J.K., et al. 2002. Proc. Natl. Acad. Sci. USA 99, 14071. Chen, J.K., et al. 2002. Genes Dev. 16, 2743. Frank-Kamenetsky, M., et al. 2002. J. Biol. 1, 10. Taipale, J., et al. 2000. Nature 406, 1005.
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