SAG

Smoothened agonist

Smoothened (Smo) is a transmembrane receptor that relays the Hedgehog (Hh) signal and plays an essential role during embryonic development and tumorigenesis. SAG is a potent cell-permeable benzothiophene compound that modulates the coupling of Smo with its downstream effector by interacting with the Smo heptahelical domain (KD = 59 nM). SAG was shown to induce Hedgehog pathway activation independently of the Hh binding receptor Patched (Ptch) (EC50= ~3 nM in NIH 3T3-derived Shh-LIGHT2 cells) and counteract inhibition of Smo by Cyclopamine (Prod. No. BML-GR334). Smo is reported to act as an activator at low concentrations and as an inhibitor at very high concentrations.

Citations: 62 View Online »

Ordering Information

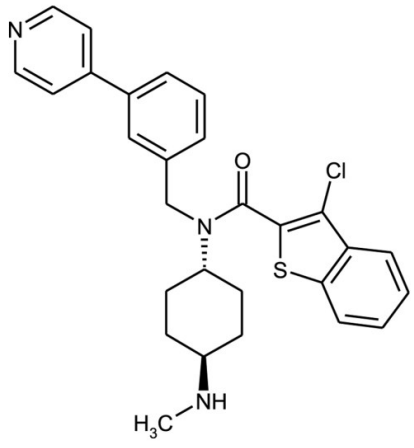
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ALX-270-426-M001	1mg

Manuals, SDS & CofA

View Online »

- Potent Smoothened (Smo) receptor agonist
- Binds directly to Smo and antagonizes Cyclopamine
- Enhancer of neuronal differentiation of iPSCs into dopaminergic neurons


N
O
Cl
N
S
NH
H3C


SAG
Enzo

Handling & Storage

Use/Stability	As indicated on product label or CoA when stored as recommended. Stock solutions in DMSO are stable for at least 1 month when stored at -20°C.
Long Term Storage	-20°C
Shipping	Ambient Temperature

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	3-chloro-N-[trans-4-(methylamino)cyclohexyl]-N-[[3-(4-pyridinyl)phenyl]methyl]-benzo[b]thiophene-2-carboxamide
Appearance	Clear thin film (lyophilized).
CAS	912545-86-9
Couple Target	Smoothened
Couple Type	Activator, Ligand
Formula	$C_{28}H_{28}ClN_3OS$
Identity	Identity determined by MS and NMR.
MW	490.1
Purity	≥95% (HPLC)
Solubility	Soluble in DMSO (10mg/ml), sparingly soluble in water (acidification with HCl increases water solubility).

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