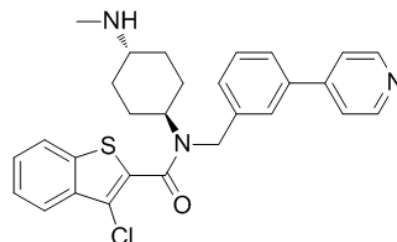


Product Name : Smo inhibitor SAG
Cat. No. : PC-43256
CAS No. : 912545-86-9
Molecular Formula : C₂₈H₂₈ClN₃OS
Molecular Weight : 490.0594
Target : Smoothened (Smo)
Solubility : DMSO: ≥ 38 mg/mL



Biological Activity

SAG is a small molecule **Hedgehog (Hh)** pathway agonist with EC₅₀ of 3 nM, specifically binds to the **Smoothened (Smo)** heptahelical bundle (K_d=59 nM).

SAG effectively activates Shh target gene transcription through the Smoothened (Smo) protein, acts downstream of Ptch1 in the Hh pathway and counteracts cyclopamine inhibition of Smo.

SAG increases Cldn5 expression, decreases endoneurial capillary permeability, and restores thermal algnesia to diabetic mice.

SAG inhibits melanin synthesis in melanocytes and pigmentation in a human skin model.

References

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Choi H, et al. *PLoS One*. 2016 Dec 12;11(12):e0168025.

Stanton BZ, et al. *Nat Chem Biol*. 2009 Mar;5(3):154-6.

Chapouly C, et al. *Cardiovasc Res*. 2016 Feb 1;109(2):217-27.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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