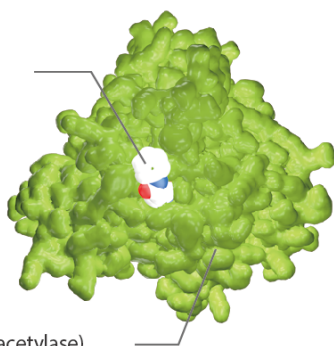


Hedgehog

HDAC Inhibitor:
Vorinostat (SAHA)



HDAC (Histone deacetylase)

Hedgehog (Hh) is composed of N-terminal and C-terminal domains that dissociate in a self-catalyzed proteolytic cleavage reaction. The N-terminal product HhNp, modified by cholesterol during self-cleavage, harbors all known Hh signaling activities. When synthesized in the absence of the C-terminal domain (and hence lacking cholesterol modification), the N-terminal domain is aberrantly targeted and released selectively into the retina.

Hedgehog signaling pathway is linked to tumorigenesis and is aberrantly activated in a variety of cancers. Hh ligands bind to and suppress the transmembrane receptor Patched (PTCH), which suppresses Smoothed (SMO), a seven-transmembrane-helix protein

that positively regulates the Hh pathway.

Sonic hedgehog (Shh) is a morphogen essential to the developing nervous system that continues to play an important role in adult life by contributing to cell proliferation and differentiation, maintaining blood-brain barrier integrity, and being cytoprotective against oxidative and excitotoxic stress, all features of importance in amyotrophic lateral sclerosis (ALS).

Indian hedgehog (Ihh), a signaling molecule that plays a pivotal role in the regulation of chondrocyte proliferation, maturation, and ossification both in long-bone development and digit joint formation, has also been found to be essential for temporomandibular joint (TMJ) development.

Desert hedgehog (Dhh), one of the Hedgehog family members, is expressed by Schwann cells of peripheral nerves.

Hedgehog Inhibitors & Modulators

Ciliobrevin A

(HPI-4)

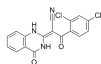
Cat. No.: HY-100790

Bioactivity: Ciliobrevin A is a **hedgehog (Hh)** signaling pathway inhibitor with median inhibitory concentration (**IC₅₀**) less than 10 μ M.

Purity: 98.34%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 25 mg, 50 mg, 100 mg



Cyclopamine

(11-Deoxojervine)

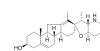
Cat. No.: HY-17024

Bioactivity: Cyclopamine is a **Hedgehog (Hh)** pathway antagonist with an **IC₅₀** of 46 nM in the Hh cell assay.

Purity: 99.95%

Clinical Data: No Development Reported

Size: 5 mg, 10 mg, 50 mg, 100 mg



Jervine

(11-Ketocyclopamine)

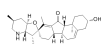
Cat. No.: HY-N0836

Bioactivity: Jervine(11-Ketocyclopamine) is a naturally occurring steroidal alkaloid that causes cyclopia by blocking sonic hedgehog(Shh) signaling; Jervine is an inhibitor of Smo.

Purity: 99.03%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg



JK184

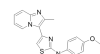
Cat. No.: HY-13307

Bioactivity: JK184 is a potent **Hedgehog (Hh)** pathway inhibitor with **IC₅₀** of 30 nM in mammalian cells.

Purity: 99.74%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg, 100 mg



RU-SKI 43

(Hhat Inhibitor)

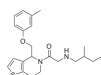
Cat. No.: HY-18366

Bioactivity: RU-SKI 43 is a small molecule inhibitor of Hhat(Hedgehog acyltransferase), the enzyme responsible for the attachment of palmitate onto Shh.

Purity: >98%

Clinical Data: No Development Reported

Size: 5 mg, 10 mg, 50 mg



RU-SKI 43 hydrochloride

(Hhat Inhibitor)

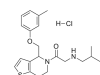
Cat. No.: HY-18366A

Bioactivity: RU-SKI 43 Hcl is a small molecule inhibitor of Hhat(Hedgehog acyltransferase), the enzyme responsible for the attachment of palmitate onto Shh.

Purity: 98.0%

Clinical Data: No Development Reported

Size: 10mM x 1mL in DMSO,
5 mg, 10 mg, 50 mg



Vismodegib

(GDC-0449)

Cat. No.: HY-10440

Bioactivity: Vismodegib (GDC-0449) is an orally active **hedgehog** pathway inhibitor with an **IC₅₀** of 3 nM. It also inhibits P-gp, ABCG2 with **IC₅₀** values of 3.0 μ M and 1.4 μ M, respectively.

Purity: 99.91%

Clinical Data: Launched

Size: 10mM x 1mL in DMSO,
10 mg, 50 mg, 100 mg, 200 mg

