

**Catalog # 10-2182**

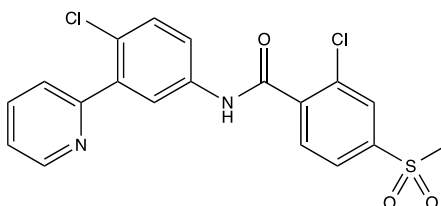
**Vismodegib**

CAS# 879085-55-9

2-Chloro-N-(4-chloro-3-(pyridine-2-yl)phenyl)-4-(methylsulfonyl)benzamide

GDC-0449

Lot # FBA1055



A potent and selective Hedgehog (Hh) pathway signaling inhibitor antagonizing SMO with a  $K_i$  of 1.3 nM).<sup>1</sup> Alters intracellular  $Ca^{2+}$  homeostasis and inhibits growth of cisplatin-resistant lung cancer cells.<sup>2</sup> Inhibits two ABC transporters, ABCG2/BCRP and ABCB1/Pgp,  $IC_{50}$ s=1.4 and 3.0  $\mu$ M respectively.<sup>3</sup> Clinically useful for the treatment of basal cell carcinoma.<sup>4</sup> Inhibits proliferation and induces apoptosis in colon cancer cell lines.<sup>5</sup>

- 1) Rominger *et al.* (2009), *Evidence for allosteric interactions of antagonist binding to the smoothed receptor*; J. Pharmacol. Exp. Therap., **329** 995
- 2) Tian *et al.* (2012), *The hedgehog pathway inhibitor GDC-0449 alters intracellular  $Ca^{2+}$  homeostasis and inhibits cell growth in cisplatin-resistant lung cancer cells*; Anticancer Res., **32** 89
- 3) Zhang *et al.* (2009), *Hedgehog pathway inhibitor HhAntag691 is a potent inhibitor of ABCG2/BCRP and ABCB1/Pgp*; Neoplasia, **11** 96
- 4) Cirrone and Harris (2012), *Vismodegib and the hedgehog pathway: a new treatment for basal cell carcinoma*; Clin. Ther., **34** 2039
- 5) Wu *et al.* (2017), *Smoothed antagonist GDC-0449 (Vismodegib) inhibits proliferation and triggers apoptosis in colon cancer cell lines*; Exp. Ther. Med., **13** 2529

**PHYSICAL DATA**

Molecular Weight:	421.30
Molecular Formula:	C <sub>19</sub> H <sub>14</sub> Cl <sub>2</sub> N <sub>2</sub> O <sub>3</sub> S
Purity:	99% by TLC and HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 200 mg/ml) or Ethanol (up to 10 mg/ml with warming)
Physical Description:	Off-white or beige solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**