NEUROMICS

Vismodegib Data Sheet

Catalog Number:	MC11108	**Product Type:**	Small Molecule
Bio-Activity:	Hedgehog signaling pathway inhibitor	**CAS #:**	879085-55-9
Research Categories:	Cell death, cancer	**Chemical Name:**	2-Chloro-N-(4-chloro-3-(pyridine-2-yl)phenyl)-4-(methylsulfonyl)benzamide
Solubility:	Soluble in DMSO (up to 200 mg/ml) or in Ethanol (up to 10 mg/ml with warming)	**Molecular Formula:**	C19H14Cl2N2O3S
Purity:	> 98%	**Molecular Weight:**	421.30
Format:	Powder	**Ship Temp:**	Ambient
Storage:	-20°C		

Application Notes

Description/Data:
A potent and selective Hedgehog (Hh) pathway signaling inhibitor antagonizing SMO with a Ki of 1.3 nM) [1]. Alters intracellular Ca2+ homeostasis and inhibits growth of cisplatin-resistant lung cancer cells [2]. Inhibits two ABC transporters, ABCG2/BCRP and ABCB1/Pgp, IC50s=1.4 and 3.0 μM respectively [3]. Clinically useful for the treatment of basal cell carcinoma [4]. Inhibits proliferation and induces apoptosis in colon cancer cell lines.

References:

1) Rominger et al. (2009), Evidence for allosteric interactions of antagonist binding to the smoothened receptor; J. Pharmacol. Exp. Therap., 329 995

2) Tian et al. (2012), the hedgehog pathway inhibitor GDC-0449 alters intracellular Ca2+ 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 anf the hedgehog pathway: a new treatment for basal cell carcinoma; Clin. Ther., 34 2039

FOR RESEARCH USE ONLY

Neuromics Antibodies • 5325 West 74th Street, Suite 8 • Edina, MN 55439
phone 866-350-1500 • fax 612-677-3976 • e-mail: pshuster@neuromics.com

5) Wu et al. (2017), Smoothened antagonist GDC-0449 (Vismodegib) inhibits proliferation and triggers apoptosis in colon cancer cell lines; Exp. Ther. Med., 13 2529

FOR RESEARCH USE ONLY

Neuromics Antibodies • 5325 West 74th Street, Suite 8 • Edina, MN 55439
phone 866-350-1500 • fax 612-677-3976 • e-mail: pshuster@neuromics.com