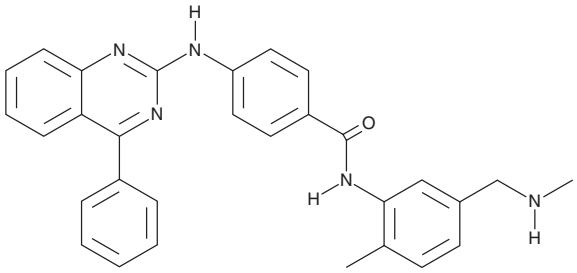
PRODUCT INFORMATION

BMS 833923

Item No. 16240

CAS Registry No.:	1059734-66-5
Formal Name:	N-[2-methyl-5-[(methylamino) methyl]phenyl]-4-[(4-phenyl-2-quinazolinyl)amino]-benzamide
Synonyms:	XL 139
MF:	$C_{30}H_{27}N_5O$
FW:	473.6
Purity:	≥98%
UV/Vis.:	λ_{max}: 315 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

BMS 833923 is supplied as a crystalline solid. A stock solution may be made by dissolving the BMS 833923 in the solvent of choice, which should be purged with an inert gas. BMS 833923 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of BMS 833923 in ethanol and DMF is approximately 30 mg/ml and approximately 25 mg/ml in DMSO.

BMS 833923 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BMS 833923 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. BMS 833923 has a solubility of approximately 0.1 mg/ml in a 1:7 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Smoothened (Smo) is a cell surface receptor that, with Patched, mediates sonic hedgehog (Shh) signaling to regulate gene expression through the Gli transcription factors.[1] BMS 833923 is an orally bioavailable inhibitor of Smo.[2,3] It blocks binding of BODIPY cyclopamine (IC_{50} = 21 nM) and inhibits Gli activation in cell lines that express wild-type Smo or activated mutant forms of Smo (IC_{50}s = 6-35 nM). BMS 833923 robustly inhibits Shh pathway activity and prevents tumor growth in medulloblastoma and pancreatic carcinoma xenograft models.

References

1. Ruiz-Gómez, A., Molnar, C., Holguín, H., *et al.* The cell biology of Smo signalling and its relationships with GPCRs. *Biochim. Biophys. Acta* **1768(4)**, 901-912 (2007).
2. Sandhiya, S., Melvin, G., Kumar, S.S., *et al.* The dawn of hedgehog inhibitors: Vismodegib. *J. Pharmacol. Pharmacother.* **4(1)**, 4-7 (2013).
3. Lin, T.L. and Matsui, W. Hedgehog pathway as a drug target: Smoothened inhibitors in development. *OncoTargets and Therapy* **5**, 47-58 (2012).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM