

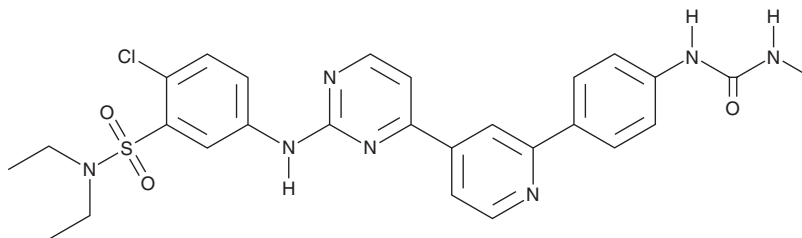
PRODUCT INFORMATION



hSMG-1 Inhibitor 11j

Item No. 41724

CAS Registry No.: 1402452-15-6
Formal Name: 2-chloro-N,N-diethyl-5-[[[4-[2-[4-[[[(methylamino)carbonyl]amino]phenyl]-4-pyridinyl]-2-pyrimidinyl]amino]-benzenesulfonamide
MF: C₂₇H₂₈ClN₇O₃S
FW: 566.1
Purity: ≥98%
Supplied as: A 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

hSMG-1 Inhibitor 11j is supplied as a solid. A stock solution may be made by dissolving the hSMG-1 inhibitor 11j in the solvent of choice, which should be purged with an inert gas. hSMG-1 Inhibitor 11j is slightly soluble (0.1-1 mg/ml) in DMSO.

Description

hSMG-1 inhibitor 11j is an inhibitor of the PI3K-related kinase SMG1 (IC₅₀ = 0.11 nM), a kinase involved in nonsense-mediated decay (NMD) of RNA.¹ It is selective for SMG1 over mTOR, cyclin-dependent kinase 1 (Cdk1), Cdk2, PI3Kα, and PI3Kγ (IC₅₀s = 0.05, 32, 7.1, 0.092 and 0.06 μM, respectively) and a panel of 25 additional kinases (IC₅₀s = >10 μM) but does inhibit glycogen synthase kinase α (GSKα) and GSKβ (IC₅₀s = 0.26 and 0.33 μM, respectively). hSMG-1 inhibitor 11j (0.3-3 μM) decreases the phosphorylation of the SMG1 substrate UPF1 in MDA-MB-361 breast cancer cells and inhibits the proliferation of MDA-MB-468 breast cancer cells (IC₅₀ = 0.075 μM).

Reference

1. Gopalsamy, A., Bennett, E.M., Shi, M., *et al.* Identification of pyrimidine derivatives as hSMG-1 inhibitors. *Bioorg. Med. Chem. Lett.* **22**(21), 6636-6641 (2012).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

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