

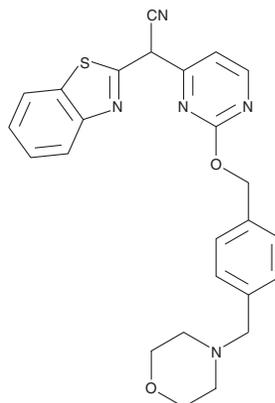
PRODUCT INFORMATION



Bentamapimod

Item No. 21482

CAS Registry No.: 848344-36-5
Formal Name: α -[2-[[4-(4-morpholinylmethyl)phenyl]methoxy]-4-pyrimidinyl]-2-benzothiazoleacetonitrile
Synonym: AS-602801
MF: C₂₅H₂₃N₅O₂S
FW: 457.5
Purity: \geq 98%
UV/Vis.: λ_{max} : 217, 261, 387 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

Bentamapimod is supplied as a crystalline solid. A stock solution may be made by dissolving the bentamapimod in the solvent of choice, which should be purged with an inert gas. Bentamapimod is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of bentamapimod in these solvents is approximately 2 mg/ml.

Description

Bentamapimod is an orally bioavailable inhibitor of Jun kinases (JNKs), with IC₅₀ values for JNK1, JNK2, and JNK3 of 80, 90, and 230 nM, respectively.^{1,2} It is selective for JNKs over a panel of 25 related kinases.¹ Bentamapimod induces regression of endometriotic lesions without suppressing estrogen action in animal models of endometriosis.^{3,4} It blocks proliferation and induces apoptosis of T cells *in vitro* and inhibits cancer stem cell survival, self-renewal, and tumor-initiating capacity *in vitro* and in mice.^{2,5}

References

1. Halazy, S. Designing heterocyclic selective kinase inhibitors: From concept to new drug candidates. *ARKIVOC ICHC-20(7)*, 496-508 (2006).
2. Ferrandi, C., Richard, F., Tavano, P., *et al.* Characterization of immune cell subsets during the active phase of multiple sclerosis reveals disease and c-Jun N-terminal kinase pathway biomarkers. *Mult. Scler.* **17(1)**, 46-56 (2011).
3. Hussein, M., Chair, D.C., Kyama, C.M., *et al.* c-Jun NH2-terminal kinase inhibitor bentamapimod reduces induced endometriosis in baboons: An assessor-blind placebo-controlled randomized study. *Fertil. Steril.* **105(3)**, 518-824 (2016).
4. Palmer, S.S., Altan, M., Denis, D., *et al.* Bentamapimod (JNK Inhibitor AS602801) induces regression of endometriotic lesions in animal models. *Reprod. Sci.* **23(1)**, 11-23 (2016).
5. Okada, M., Kuramoto, K., Takeda, H., *et al.* The novel JNK inhibitor AS602801 inhibits cancer stem cells *in vitro* and *in vivo*. *Oncotarget* **7(19)**, 27021-27032 (2016).

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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