

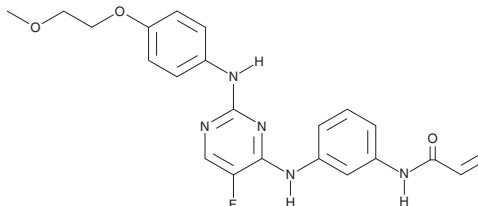
PRODUCT INFORMATION



AVL-292

Item No. 17993

CAS Registry No.: 1202757-89-8
Formal Name: N-[3-[[5-fluoro-2-[[4-(2-methoxyethoxy)phenyl]amino]-4-pyrimidinyl]amino]phenyl]-2-propenamide
Synonyms: CC-292, Spebrutinib
MF: C₂₂H₂₂FN₅O₃
FW: 423.4
Purity: ≥98%
UV/Vis.: λ_{max}: 271 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

AVL-292 is supplied as a crystalline solid. A stock solution may be made by dissolving the AVL-292 in the solvent of choice. AVL-292 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of AVL-292 in ethanol is approximately 0.5 mg/ml and approximately 20 mg/ml in DMSO and DMF.

AVL-292 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AVL-292 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AVL-292 has a solubility of approximately 0.03 mg/ml in a 1:30 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

AVL-292 is a covalent inhibitor of Bruton's tyrosine kinase (BTK; IC₅₀ = 5.9 nM).¹ It is selective for BTK over a panel of 61 kinases when used at a concentration of 1 μM but does inhibit the additional Tec family kinases BMX, Itk, Tec, and TXK (IC₅₀s = 0.7, 36, 6.2, and 8.9 nM, respectively). AVL-292 inhibits naïve human B cell proliferation (EC₅₀ = 3 nM). It reduces joint damage, pannus formation, cartilage degradation, and bone erosion in a mouse model of rheumatoid arthritis induced by collagen when used at doses of 3, 10, and 30 mg/kg.

Reference

1. Evans, E.K., Tester, R., Aslanian, S., et al. Inhibition of Btk with CC-292 provides early pharmacodynamic assessment of activity in mice and humans. *J. Pharmacol. Exp. Ther.* **346**(2), 219-228 (2013).

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.

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