

PRODUCT INFORMATION

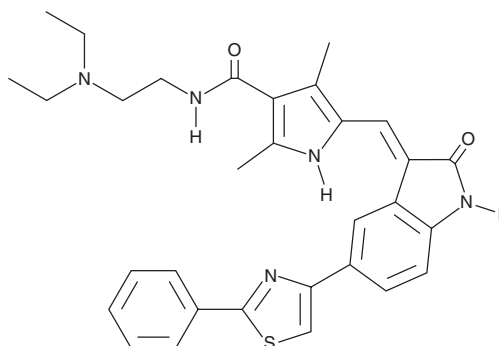


Amcasertib

Item No. 22980

CAS Registry No.: 1129403-56-0
Formal Name: N-[2-(diethylamino)ethyl]-5-[[1,2-dihydro-2-oxo-5-(2-phenyl-4-thiazolyl)-3H-indol-3-ylidene]methyl]-2,4-dimethyl-1H-pyrrole-3-carboxamide

Synonym: BBI503
MF: C₃₁H₃₃N₅O₂S
FW: 539.7
Purity: ≥95%
UV/Vis.: λ_{max}: 247, 307, 410 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

Amcasertib is supplied as a crystalline solid. A stock solution may be made by dissolving the amcasertib in the solvent of choice, which should be purged with an inert gas. Amcasertib is soluble in the dimethyl formamide (DMF) at a concentration of approximately 5 mg/ml.

Amcasertib is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, amcasertib should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Amcasertib has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Amcasertib is an inhibitor of cancer stem cells (CSCs).¹ It inhibits the growth of HT-29 and MDA-MB-231 cancer cells (IC₅₀s = 100-250 nM for both) and exhibits a 2-fold increase in potency for a population of SW480 cells enriched for CSCs. Amcasertib reduces spherogenesis of CD44⁺-enriched FaDu cells. Oral administration of amcasertib (100 mg/kg) reduces tumor growth in PC3, HepG2, FaDu, and MKN45 mouse xenograft models. Amcasertib also inhibits EGFR, C-MET, HER2, and PDGFRα *in vitro* without reducing global tyrosine kinase activity.

Reference

1. Li, C.J., Liu, J.-F., Li, W., *et al.* Compositions of kinase inhibitors and their use for treatment of cancer and other diseases related to kinases. WO2009033033A2. (2009).

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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