

Product Name : Borussertib

Synonyms : Borussertib

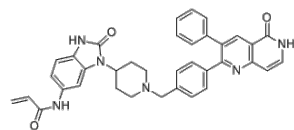
Cat No. : M12732

CAS Number : 1800070-77-2

Molecular Formula : C₃₆H₃₂N₆O₃

Formula Weight : 596.69

Chemical Name : N-(2-oxo-3-(1-(4-(5-oxo-3-phenyl-5,6-dihydro-1,6-naphthyridin-2-yl)benzyl)piperidin-4-yl)-2,3-dihydro-1H-benzo[d]imidazol-5-yl)acrylamide



Description : Borussertib is a potent, first-in-class, covalent-allosteric AKT inhibitor; specifically binds to two non-catalytic cysteines in AKT at 120 positions 296 and 310; exhibits pronounced sensitivity to breast cancer cell line ZR-75-1 with EC₅₀ of 5 nM, 7- to 12-fold higher potency compared to reversible allosteric inhibitor miransertib and MK-2206; demonstrated strong antiproliferative activity in cancer cell lines harboring genetic alterations within the PTEN, PI3K, and RAS signaling pathways, b displayed antitumor activity in combination with the MEK inhibitor trametinib in patient-derived xenograft models of mutant KRAS pancreatic and colon cancer.

Pathway : Cytoskeleton/Cell Adhesion Molecules

Target : Akt

Receptor : Akt

Solubility : —

SMILES : C=CC(NC1=CC=C(C(N2C3CCN(CC4=CC=C(C5=NC6=C(C(NC=C6)=O)C=C5C7=CC=CC=C7)C=C4)CC3)=C1)NC2=O)=O

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Weisner J, et al. Cancer Res. 2019 Mar 11. pii: canres.2861.2018.