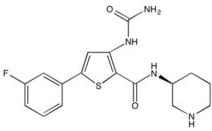
AZD7762, Checkpoint kinase 1/2 inhibitor

Catalog	Unit
TBI4771-5MG	5 mg
TBI4771-25MG	25 mg

Product Details

Formal Name: 3-(Carbamoylamino)-5-(3-fluorophenyl)-N-[(3S)-piperidin-3-yl]thiophene-2-carboxamide Molecular Formula: $C_{17}H_{19}FN_4O_2S \cdot HCl$ Formula Weight: 398.88 CAS Number: 860352-01-8 (free base) Purity: >98% Formulation: powder Solubility: Soluble in DMSO (up to at least 25 mg/ml) Storage: -20°C Stability: \geq 1 year.



Applications

Checkpoint kinase 1/2 inhibitor

Functions

AZD7762 is a potent and selective inhibitor of checkpoint kinases 1 and 2 (IC50 = 5 nM for both). It abrogates DNA damage-induced S and G2 checkpoints and enhances the efficacy of DNA damaging agents such as gemcitabine and irinotecan. AZD7762 also enhanced the radiation sensitivity of p53-mutant tumor cell lines. AZD7762 was able to overcome imatinib resistance in CML cells. AZD7762 has also been reported to be a potent inhibitor of MEKK2 (MAP3K2) – IC50 = 20 nM. It has also recently been shown to inhibit antigen-stimulated degranulation from RBL-2H3 (IC50 = 28 nM) and BMMCs (IC50 = 99 nM) as well as suppressing degranulation of LAD2 human mast cells (IC50 = 50 nM) via Syk suppression through inactivation of Lyn and Fyn kinases.

Application Procedures

First dissolved in DMSO (up to at least 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20° for up to 1 month.

For research use only.