

Data Sheet

Product Information

Catalog Number	BP12882
Product Name	Rabusertib
Description	Rabusertib is an inhibitor of the cell cycle checkpoint kinase 1 (chk1) with potential chemopotentiating activity. Rabusertib has been used in trials studying the treatment of Cancer, Solid Tumors, Advanced Cancer, Pancreatic Neoplasms, and Non-Small Cell Lung Cancer.
Targets&IC50	Chk1:7 nM
In vitro	Chk1 is an ATP-dependent serine-threonine kinase and a key component in the DNA replication-monitoring checkpoint system activated by double-stranded breaks (DSBs). Chk1 contributes to all currently defined cell cycle checkpoints, including G1/S, intra-S-phase, G2/M, and the mitotic spindle checkpoint. By inhibiting the activity of chk1, LY2603618 prevents the repair of DNA caused by DNA-damaging agents, thus potentiating the antitumor efficacies of various chemotherapeutic agents. However, preClinicalal data involving LY2603618 has not been published until now. Inhibition of Chk1 is predicted to enhance the effects of antimetabolites, such as gemcitabine. LY2603618 treatment impairs DNA synthesis, increases DNA damage (via mitotic defects), induces apoptosis, and has synergistic activity with pemetrexed, especially in p53 mutant tumor cells.
In vivo	In xenograft models, LY2603618 delays tumor growth when given in combination with pemetrexed.
Synonyms	LY2603618, IC-83
CAS No.	911222-45-2
Chemical Formula	C18H22BrN5O3

Molecular Weight	436.31
Solubility	DMSO: 11 mg/mL (25.2 mM) Ethanol: <1 mg/mL; H2O: <1 mg/mL
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	$ \begin{array}{c} H \\ 0 \\ 0 \\ 1 \\ N \\ N \\ N \\ H \\ H \\ H \\ H \\ H \\ H \\ H$

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