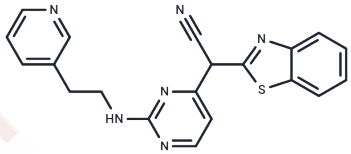
Data Sheet (Cat.No.T2343)

TargetMol

AS601245

Chemical Properties



CAS No. : 345987-15-7

Formula: C20H16N6S

Molecular Weight: 372.45

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	AS601245 is an inhibitor of the c-Jun NH2-terminal kinase (JNK), with neuroprotective properties.
Targets(IC50)	JNK
Kinase Assay	FLT3 phosphorylation: Leukemia cells are washed in phosphate-buffered saline (PBS), then lysed by resuspending the cells in lysis buffer (20 mM Tris pH 7.4, 100 mM NaCl, 1% Igepal, 1 mM EDTA, 2 mM NaVO4, plus Complete protease inhibitor KW-2449 for 30 minutes while rocking. The extract is clarified by centrifugation at 1.6 × 104?g and the supernatant is assayed for protein (Bio-Rad). A 50-µg aliquot is removed as a whole-cell lysate for analysis of STAT5, and the remainder is used for immunoprecipitation with anti-FLT3. Anti-FLT3 antibody is added to the extract for overnight incubation, then protein A sepharose is added for 2 additional hours. Separate sodium dodecyl sulfate-polyacrylamide electrophoresis (SDS-PAGE) gels for whole-cell lysate and immunoprecipates are run in parallel. After transfer to Immobilon membranes, immunoblotting is performed with antiphosphotyrosine antibody (4 g10) to detect phosphorylated FLT3 or, for the whole-cell lysate gels, with a rat monoclonal antibody against phosphorylated STAT5 (residue Y694) then stripped and reprobed with anti-FLT3 antibody to measure total FLT3. Proteins are visualized using chemiluminescence, exposed on Kodak BioMax XAR film, developed, and scanned using a Bio-Rad GS800 densitometer. The concentration of KW-2449 for which the phosphorylation of FLT3 or STAT5 is inhibited to 50% of its baseline (IC50) is determined using linear regression analysis of the dose response curves. For direct analysis of FLT3 and STAT5 in circulating blasts, peripheral blood is collected in heparinized tubes and promptly chilled on ice. Samples are centrifuged for 10 minutes at 900 g, at 4 °C. The plasma is removed and stored frozen at ?80 °C. The buffy coat is carefully transferred to ice-cold PBS, layered onto chilled Ficoll-Hypaque, and centrifuged for 5 minutes at 600 g, at 4 °C. All subsequent steps are carried out at 4 °C. Mononuclear cells are collected and washed rapidly once in red blood cell lysis buffer (0.155 M NH4Cl, 0.01 M KHCO3, 0.1 mM EDTA), then washed once in PBS. Cells are then lysed as described for FLT3 and STAT5 analysis.

Solubility Information

Solubility	DMSO: 50 mg/mL (134.25 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (2.68 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6849 mL	13.4246 mL	26.8492 mL
5 mM	0.537 mL	2.6849 mL	5.3698 mL
10 mM	0.2685 mL	1.3425 mL	2.6849 mL
50 mM	0.0537 mL	0.2685 mL	0.537 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Carboni S, et al. Br J Pharmacol. 2008 Jan;153(1):157-163.