Product Name: Fostamatinib (R788)

Chemical Properties

Product Name: Fostamatinib (R788)
Cas No.: 901119-35-5
M.Wt: 580.46
Formula: C23H26FN6O9P

Chemical Name: [6-[[5-fluoro-2-(3,4,5-trimethoxyanilino)pyrimidin-4-yl]amino]-2,2-dimethyl-3-oxopyrido[3,2-b][1,4]oxazin-4-yl]methyl dihydrogen phosphate

Canonical SMILES: CC1(C(=O)N(C2=C(O1)C=CC(=N2)NC3=NC(=NC=C3F)NC4=CC(=C(C(=C4)OC)OC)OC)COP(=O)(O)O)C

Solubility: >100.4mg/mL in DMSO

Storage: Store at -20°C

General tips: For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shopping Condition: Evaluation sample solution: ship with blue ice
All other available size: ship with RT, or blue ice upon request

Biological Activity

Targets: Tyrosine Kinase
Pathways: Spleen Tyrosine Kinase (Syk)

Description:
Fostamatinib is a small molecule inhibitor of spleen tyrosine kinase (Syk) with IC50 value of 41nM [1]. Fostamatinib is an orally bioavailable prodrug of R406. It is developed for the treatment of autoimmune diseases. The effective metabolite of fostamatinib, R406, is an ATP-competitive
inhibitor of Syk with Ki value of 30nM. R406 also inhibits the activity of other kinases including Flt3, Lyn (IC50=63nM) and Lck (IC50=37nM). It is found that R406 inhibits both BCR and FcR mediated responses in vitro. Besides that, R406 also shows effects in other cell types and signalling pathways. In the in vivo assay, fostamatinib shows to be highly active to inhibit FcR-mediated signaling in various animal models of allergy, autoimmunity and inflammation. Moreover, fostamatinib also exerts efficacy in SLE animal models. Treatment of fostamatinib suppresses the established renal and skin disease and reduces lymphadenopathy in the MRL/lpr strain [1].

Reference:

Product Validation

Treatment of R788 inhibits Syk and its downstream targets

Treatment of R788 inhibits cell proliferation

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.