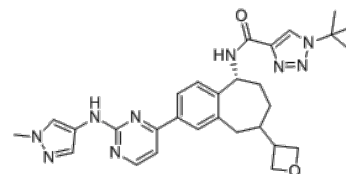


Product Name : BIIB091
Cat. No. : PC-72229
CAS No. : 2247614-80-6
Molecular Formula : C₂₉H₃₅N₉O₂
Molecular Weight : 541.66
Target : BTK
Solubility : 10 mM in DMSO (5.4 mg/mL)



Biological Activity

BIIB091 (BIIB 091) is a novel potent, selective, reversible **BTK** inhibitor with IC₅₀ of 0.45 nM in enzymatic assays.

BIIB091 demonstrated > 500-fold selectivity for BTK relative to all other kinases from a panel of >400 individual kinases evaluated in the DiscoverX KINOMEScan.

BIIB091 inhibited CD69 induction in anti-BCR-stimulated B cells in a dose-dependent manner in PBMCs (IC₅₀=5.4 nM) and in mouse splenocytes (IC₅₀=16 nM).

BIIB091 blocks B-cell proliferation and antigen-presenting functions in vitro and the associated B-cell activation transcriptional programme, effectively blocks BCR-mediated antigen presentation to T cells and blocks myeloid cell functions in vitro.

BIIB091 blocks B-cell activation and differentiation into antibody-secreting and germinal center B cells in vivo, also demonstrates complete inhibition of B-cell activation over the dosing interval in a human phase 1 trial.

References

Hopkins BT, et al. *J Med Chem.* 2022 Jan 27;65(2):1206-1224.

Bame E, et al. *Clin Transl Immunology.* 2021 Jun 14;10(6):e1295.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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