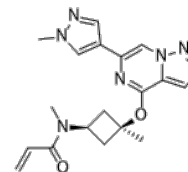


**Product Name** : BIIB129  
**Cat. No.** : PC-22306  
**CAS No.** : 2770960-52-4  
**Molecular Formula** : C<sub>19</sub>H<sub>22</sub>N<sub>6</sub>O<sub>2</sub>  
**Molecular Weight** : 366.43  
**Target** : BTK  
**Solubility** : 10 mM in DMSO



CAS: 2770960-52-4

## Biological Activity

BIIB129 (BIIB-129) is a potent, selective, brain-penetrant and covalent inhibitor of **BTK** with binding KD of 0.63 nM, covalently targets side chain nitrogen of Asn484 in BTK.

BIIB129 inhibits CD69 expression on CD19+ B cells in human whole blood upon stimulation with anti-IgD with IC<sub>50</sub> of 79 nM.

BIIB129 potently inhibits TMD8 B cell proliferation with IC<sub>50</sub> of 0.82 nM.

BIIB129 has high selectivity scores (S(10)-score = 0.025 in a selectivity panel of 403 kinases).

BIIB129 has sufficient bioavailability in rats and cyno, and PKPB modeling suggested low projected total human doses to cover the IC<sub>90</sub> in the brain over the dosing interval (20 and 40 mg BID, respectively).

BIIB129 demonstrates BTK-dependent in vivo efficacy in the CNS in two distinct preclinical models by inhibiting both TMD8 B cells transplanted in the CNS of immunodeficient mice and microglial activity in an anti-MOG mouse model.

## References

Himmelbauer MK, et al. *J Med Chem.* 2024 May 7. doi: 10.1021/acs.jmedchem.4c00220.

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

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