Bemcentinib (GMP)

Cat. No.: HY-15150G

CAS No.: 1037624-75-1

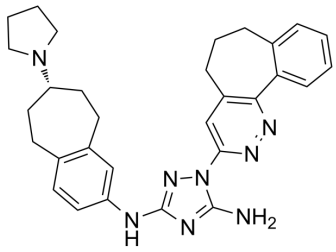
Molecular Formula: $C_{30}H_{34}N_8$

Molecular Weight: 506.64

Target: TAM Receptor

Pathway: Protein Tyrosine Kinase/RTK

Storage: Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Bemcentinib (R428) GMP is an orally active and selective inhibitor of Axl with an IC_{50} of 14 nM[1][2].
IC_{50} & Target	IC50: 14 nM (Axl kinase)[1][2].
In Vitro	Bemcentinib (R428) (2μM) significantly interferes with mechanisms of migration and invasion of Axlpos melanoma cells at levels comparable to Axl knockdown[1]. Bemcentinib (R428) synergizes with CDDP to enhance suppression of liver micrometastasis[2]. Bemcentinib (R428) (50 nM-1 μM) causes a concentration-dependent inhibition of preadipocyte differentiation into mature adipocytes, as evidenced by reduced lipid uptake[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Bemcentinib (R428) (125 mg/kg, p.o.) significantly blocks MDA-MB-231-luc-D3H2LN metastases development in two independent mouse models of breast cancer dissemination, suppresses both tumor angiogenesis and vascular endothelial growth factor (VEGF)-induced corneal neovascularization in vivo[2]. Bemcentinib (R428) (75 mg/kg/day, 25 mg/kg twice daily, p.o.) makes mice keep on a high-fat diet resulted in significantly reduced weight gain and subcutaneous and gonadal fat mass[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cancer Cell. 2018 Dec 10;34(6):954-969.e4.
- Cell Stem Cell. 2020 Jul 2;27(1):125-136.e7.
- Mil Med Res. 2023 Feb 22;10(1):7.
- Nat Commun. 2023 Jun 15;14(1):3560.
- Neuron. 2022 Sep 7;S0896-6273(22)00749-8.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Sensi M, et al. Human cutaneous melanomas lacking MITF and melanocyte differentiation antigens express a functional Axl receptor kinase. J Invest Dermatol. 2011 Dec;131(12):2448-57.

[2]. Lijnen HR, et al. Growth arrest-specific protein 6 receptor antagonism impairs adipocyte differentiation and adipose tissue development in mice. J Pharmacol Exp Ther. 2011 May;337(2):457-64.

[3]. Holland SJ, et al. R428, a selective small molecule inhibitor of Axl kinase, blocks tumor spread and prolongs survival in models of metastatic breast cancer. Cancer Res. 2010 Feb 15;70(4):1544-54.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA