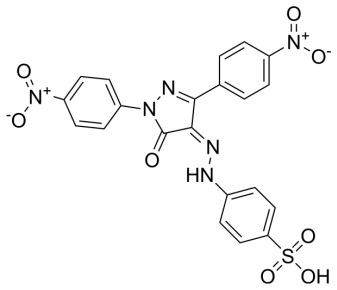
GS-493

Cat. No.:	HY-120159
CAS No.:	1710337-31-7
Molecular Formula:	$C_{21}H_{14}N_6O_8S$
Molecular Weight:	510.44
Target:	Phosphatase; SHP2
Pathway:	Metabolic Enzyme/Protease; Protein Tyrosine Kinase/RTK
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	GS-493 is a selective protein tyrosine phosphatase SHP2 (PTPN11) inhibitor with an IC_{50} of 71 nM. GS-493 is 29- and 45-fold more active toward SHP2 than related SHP1 and PTP1B. GS-493 blocks cellular motility and growth of cancer cells. Antitumor activity[1].
IC_{50} & Target	IC50: 71 nM (SHP2); 2.08 μM (SHP1); 3.17 μM (PTP1B)[1]
In Vitro	GS-493 (0.0625-10 μM) blocks hepatocyte growth factor (HGF)-stimulated epithelial-mesenchymal transition of human pancreatic adenocarcinoma (HPAF) cells[1]. GS-493 (40 μM, a couple of days) blocks growth of the human NSCL cancer cell line LXFA 526L in soft agar and decreases the number of tumor cell colonies to 32%[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	GS-493 (46 mg/kg; i.p.; daily for 27 days) inhibits tumor growth significantly in a murine xenograft model[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Nude mouse xenograft model (strain NMRI nu/nu mice)
Dosage:	46 mg/kg (45.93 mg in 3 mL DMSO per kg)
Administration:	i.p.; daily for 27 days
Result:	Inhibited tumor growth significantly.

CUSTOMER VALIDATION

- Int Immunopharmacol. 2022 Jul 16;110:109063.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Grosskopf S, et al. Selective inhibitors of the protein tyrosine phosphatase SHP2 block cellular motility and growth of cancer cells in vitro and in vivo. ChemMedChem. 2015;10(5):815-826.

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