

Data Sheet

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Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 CSF1R-IN-3

 Cat. No.
 :
 PC-24733

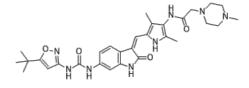
 CAS No.
 :
 2760584-90-3

 Molecular Formula
 :
 C₃₀H₃₈N₈O₄

 Molecular Weight
 :
 574.69

Target : c-Fms (CSF1R)

Solubility : 10 mM in DMSO



CAS: 2760584-90-3

Biological Activity

CSF1R-IN-3 is a potent, selective and orally bioavailable CSF-1R inhibitor with IC50 of 2.1 nM.

CSF1R-IN-3 concentration-dependently inhibited the phosphorylation of CSF-1R and AKT in both BMDMs and PMA-differentiated THP-1 cells.

CSF1R-IN-3 shows high binding affinity to CSF-1R with a dissociation constant (KD) of 3.4 nM in SPR assays.

CSF1R-IN-3 (30 and 100 nM) potently inhibits the migration of macrophages.

CSF1R-IN-3 (30 and 100 nM) could downregulate the messenger RNA (mRNA) expressions of Il10, Arg1, Chil3, Retnla, and Vegf and upregulate the expressions of Il12, Tnf, Il6, and Nos2.

CSF1R-IN-3 inhibits the progression of colorectal cancer by suppressing the migration of macrophages, reprograming M2-like macrophages to the M1 phenotype, and enhancing the antitumor immunity.

References

Qi Lv, et al. J Med Chem. 2021 Dec 9;64(23):17184-17208.

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

E-mail: tech@probechem.com