

Ipafricept

Chemical Properties

CAS No. :	1391727-24-4
Formula:	
Molecular Weight:	41.12 kDa
Storage:	Store at low temperature -20°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>

Biological Description

Description	Ipafricept (OMP-54F28) is a recombinant fusion protein consisting of the extracellular portion of the human frizzled-8 receptor fused to a fragment of human IgG1 Fc, and a Wnt inhibitor that blocks Wnt signaling. Ipafricept is a decoy receptor for Wnt ligands and has anticancer activity, and may be useful in the study of solid tumors.
Targets(IC50)	Wnt/beta-catenin
In vitro	Ipafricept inhibited the proliferative and migratory effects of the peptide RL-QN15 on human embryonic stem cells (hESCs) after treatment with 10 µg/mL for 4 hours. When Ipafricept was treated with 10 µg/mL for 0-48 hours, it reversed the RL-QN15-induced activation of the Wnt/β-catenin signaling pathway, which in turn reversed the effects of RL-QN15 on the proliferation, migration and stemness of hESCs. [1]
In vivo	Ipafricept administered intraperitoneally at a dose of 10 mg/kg per week or 25 mg/kg every 2 weeks for 42 days in combination with Gemcitabine (50 mg/kg per week or 5 mg/kg per week) and Nab-paclitaxel (10 mg/kg per week) significantly enhanced tumor growth inhibition. In a mouse model of ovarian cancer xenografts, Ipafricept administered intraperitoneally at a dose of 45 mg/kg every 2 weeks for 42 days, in combination with Nab-paclitaxel (7.5 mg/kg/week), demonstrated enhanced anti-tumor activity over Carboplatin (30 mg/kg/week). In a mouse model of total skin injury, Ipafricept administered subcutaneously at a dose of 10 mg/kg on days 0 and 3 was able to compete with RL-QN15 for binding and reduce the interaction of RL-QN15 with FZD8, thereby counteracting its activation of the Wnt/β-catenin signaling pathway. [1][2]

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.0243 mL	0.1216 mL	0.2432 mL
5 mM	0.0049 mL	0.0243 mL	0.0486 mL
10 mM	0.0024 mL	0.0122 mL	0.0243 mL
50 mM	0.0005 mL	0.0024 mL	0.0049 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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