Tagraxofusp

Cat. No.:	HY-P99536
CAS No.:	2055491-00-2
Target:	Interleukin Related
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description

Tagraxofusp (SL-401) is a potent IL-3 receptor inhibitor to inhibits plasmacytoid dendritic cells (pDCs) growth in multiple myeloma (MM) bone marrow (BM) microenvironment. Tagraxofusp has synergistic effect with Bortezomib (HY-10227) and Pomalidomide (HY-10984) to suppress multiple myeloma (MM)[1].

IC_{50} & Target

IL-3

In Vitro

Tagraxofusp (0-1367 pM; 72 h) inhibits pDCs viability, as well as pDC-induced proliferation of MM cells.Tagraxofusp (0-136.7 pM; 2-3 weeks) inhibits osteoclast formation and bone resorption, as well as stabilizes osteoblast formation[1].
Tagraxofusp (0-13.67 nM; 48 h) targets tumor-initiating stem-like cells in MM[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	Cancer stem-like cells in MM
Concentration:	0 nM, 0.013 nM, 0.13 nM, 1.3 nM, 13.67 nM
Incubation Time:	48 hours
Result:	Inhibits cancer stem-like cells with s of 30 pM (pDCs), 50 nM (MM-SP-Oct4 cells), 75 pM (RPMI-8226-Oct4 cells), 350 pM (MM-SP cells), and 1367 pM (RPMI-8226 cells), respectively.

In Vivo

Tagraxofusp (12-50 μg/kg; i.v.; 5 times per week for 3 weeks) blocks pDC-induced tumor growth and prolongs SCID-hu mice survival in subcutaneous INA-6 MM xenograft model[1].
Tagraxofusp (16 μg/kg; i.v.; 5 times per week for 1 weeks) enhances the anti-MM activity of 2.5 mg/kg Pomalidomide in CB-17 mice of subcutaneous MM xenograft model[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	SCID-hu mice with INA-6 MM cells[1]
Dosage:	12 μg/kg, 16 μg/kg, 25 μg/kg and 50 μg/kg
Administration:	Intravenous injection; for 5 consecutive days each week for 3 weeks

Result:	Blocked pDC-induced tumor growth and prolonged mice survival at 12 μg/kg. Showed well tolerance at 16 μg/kg, while higher doses resulted in body weight decrease and toxicity.

Animal Model:	CB-17 mice with subcutaneous MM xenograft model[1]
Dosage:	16 μg/kg; with or without 2.5 mg/kg Pomalidomide (p.o.; 4 consecutive days weekly for 2 weeks)
Administration:	Intravenous injection; dose at 5 consecutive days for first week
Result:	Enhanced the anti-MM activity of proteasome inhibitor and immunomodulatory drug pomalidomide.

REFERENCES

[1]. Ray A, et al. A novel agent SL-401 induces anti-myeloma activity by targeting plasmacytoid dendritic cells, osteoclastogenesis and cancer stem-like cells. Leukemia. 2017 Dec;31(12):2652-2660.

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