Pavurutamab

Cat. No.:	HY-P99814
CAS No.:	2250292-39-6
Target:	CD3
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description

Pavurutamab (AMG-701) is a bispecific T cell engager molecule that anti-CD3 and anti-B cell maturation antigens (BCMA). Pavurutamab has an extended half-life based on Pacanalotamab (HY-P99798). The Fc of Pavurutamab is coupled to molecules to improve pharmacokinetic parameters. Pavurutamab has potential applications in immune regulation and multiple myeloma (MM)[1][2][3][4].

IC_{50} & Target

B cell maturation antigens, BCMA[1]

In Vitro

Pavurutamab (0-10000 pM; 48 h) induces $CD69^+$, $CD25^+$ T cell activation and IFNγ, TNFα, IL-2, IL-4, IL-6, IL-10 cytokine secretion[5].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Pavurutamab (0.02, 0.2 and 2 mg/kg; i.v.; single dose on days 3, 8, 13) reduces tumor volume with time and dose dependent manner in mouse xenograft models[5].

Pavurutamab (0.005, 0.05 and 0.5 mg/kg; i.v.; every 5 days for 6 administrations, lasting for 30 days) reduces tumor volume and increases survival with time and dose dependent manner in NOD/SCID mice transplanted with L-363 multiple myeloma (MM) cells[5].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Female NOD/SCID mice transplanted with NCI-H929 MM cells mixed with PBMCs[5].
Dosage:	0.02, 0.2 and 2 mg/kg.
Administration:	Intravenous injection; single dose on days 3, 8, 13.
Result:	Reduced tumor volume.

Animal Model:	NOD/SCID mice orthotopically transplanted with L-363 MM cells[5].
Dosage:	0.005, 0.05 and 0.5 mg/kg.
Administration:	Intravenous injection; every 5 days for 6 administrations, starting from day 9 and lasting for 30 days.

Result:	Reduced tumor volume and increased survival.

REFERENCES

[1]. Sheridan C. Bispecific antibodies poised to deliver wave of cancer therapies. Nat Biotechnol. 2021 Mar;39(3):251-254.

[2]. Goldsmith SR, et al. Bispecific Antibodies for the Treatment of Multiple Myeloma. Curr Hematol Malig Rep. 2022 Dec;17(6):286-297.

[3]. Cho SF, et al. The immunomodulatory drugs lenalidomide and pomalidomide enhance the potency of AMG 701 in multiple myeloma preclinical models. Blood Adv. 2020 Sep 8;4(17):4195-4207.

[4]. Harrison S J, et al. A phase 1 first in human (FIH) study of AMG 701, an anti-B-cell maturation antigen (BCMA) half-life extended (HLE) BiTE®(bispecific T-cell engager) molecule, in relapsed/refractory (RR) multiple myeloma (MM)[J]. Blood, 2020, 136: 28-29.

[5]. Goldstein RL, et al. AMG 701 induces cytotoxicity of multiple myeloma cells and depletes plasma cells in cynomolgus monkeys. Blood Adv. 2020 Sep 8;4(17):4180-4194.

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