

Pasotuxizumab

Cat. No.:	HY-P99802
CAS No.:	1442657-12-6
Target:	CD3
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	Pasotuxizumab (BAY 2010112) is a PSMA and CD3 bispecific T-cell engager (BiTE). Pasotuxizumab binds to CD3 and PSMA with K_D s of 9.4 nM and 47.0 nM for human CD3 and PSMA. Pasotuxizumab can be used for research of metastatic castration-resistant prostate cancer (mCRPC) ^{[1][2]} .	
IC₅₀ & Target	K_D s: 9.4 nM and 16.3 nM for human and cynomolgus monkey CD3. K_D s: 47.0 nM and 212.6 nM for human and cynomolgus monkey PSMA.	
In Vitro	Pasotuxizumab (0-100 ng/mL approximately, 48 h) leads to activation of CD4+ and CD8+ T cell populations, with EC_{50} s of 3.4-6.7 ng/mL for human cocultures, and 13.7-21.2 ng/mL for cynomolgus monkey cell cocultures ^[2] . Pasotuxizumab (0-100 ng/mL approximately, 48 h) increases release of interferon- γ , TNF- α , IL-2 and IL-10 in T cells ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	Pasotuxizumab (0-100 ng/mL approximately, 48 h) leads to activation of CD4+ and CD8+ T cell populations, with EC_{50} s of 3.4-6.7 ng/mL for human cocultures, and 13.7-21.2 ng/mL for cynomolgus monkey cell cocultures ^[2] . Pasotuxizumab (0-100 ng/mL approximately, 48 h) increases release of interferon- γ , TNF- α , IL-2 and IL-10 in T cells ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	PC-3-huPSMA mouse xenograft model ^[2]
	Dosage:	0.005-5 mg/kg
	Administration:	i.v., once daily
	Result:	Inhibited tumor growth by 86% (0.005 mg/kg/d) and 99% (5 mg/kg/d).
	Animal Model:	BALB/c mice (PK Assay) ^[2]
	Dosage:	0.1, 0.3, and 1 mg/kg
	Administration:	i.v. bolus administration or s.c.
	Result:	Pharmacokinetic profile of Rafivirumab.

Dose (mg/kg)	AUC (mg h/L)	CL _{matrix} (L/h/kg)	T _{1/2} (h)	F (%)
i.v. (0.3)	0.93	0.32	9.7	100
s.c. (0.3)	0.17		11	18

REFERENCES

- [1]. Horst-Dieter Hummel, et al. Phase 1 study of pasotuxizumab (BAY 2010112), a PSMA-targeting Bispecific T cell Engager (BiTE) immunotherapy for metastatic castration-resistant prostate cancer (mCRPC). *Journal of Clinical Oncology* 2019 37:15_suppl, 5034-5034.
- [2]. Friedrich M, et al. Regression of human prostate cancer xenografts in mice by AMG 212/BAY2010112, a novel PSMA/CD3-Bispecific BiTE antibody cross-reactive with non-human primate antigens. *Mol Cancer Ther.* 2012 Dec;11(12):2664-73.

Caution: Product has not been fully validated for medical applications. For research use only.

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