BACE MedChemExpress

Product Data Sheet

Inebilizumab

Cat. No.:	HY-P99113
CAS No.:	1299440-37-1
Target:	CD19; ADC Antibody
Pathway:	Immunology/Inflammation; Antibody-drug Conjugate/ADC Related
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

Description	Inebilizumab is an anti-CD19 monoclonal antibody (mAb) with enhanced antibody-dependent cell-mediated cytotoxicity against B cells. Inebilizumab can be used for multiple sclerosis and neuromyelitis optica research ^[1]		
In Vitro	Inebilizumab is derived from the mouse anti-human mAb HB12b, which had already shown impressive activity in depletion of B cells in transgenic mice carrying the human CD19 gene (hCD19 Tg) ^[1] . Inebilizumab potently depletes CD19-expressing B cells, including primary human B cells, B cell lines derived from multiple tumor types, and neoplastic B cells ^[1] . Inebilizumab demonstrates equal or better activity than Rituximab (HY-P9913) in depletion of human primary B cells in autologous ADCC assays and shows potent ADCC activity against human in vitro-differentiated and primary plasma cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		
In Vivo	Inebilizumab (MEDI-551) (0-10 mg/kg; i.v.; once) depletes B cells from blood and spleen by mouse macrophages in vivo and phagocytosis of murine B cells ex vivo ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		
	Animal Model: Dosage:	huCD19/CD20 double Tg mice ^[2] 0.5, 2, or 10 mg/kg	
	Administration:	Tail vein injection, once	
	Result:	Depleted B cells from blood and spleen, B-cell depletion in blood and spleen was maintained for more than 2 weeks after a single 10 mg/kg administration (better than Rituximab). Resulted in a substantial reduction (on average by 91.4% by day 3) in BM B220+muCD19+ B cells. Led to depletion of B cell by mouse macrophages.	

REFERENCES

[1]. Chen D, et al. Inebilizumab, a B Cell-Depleting Anti-CD19 Antibody for the Treatment of Autoimmune Neurological Diseases: Insights from Preclinical Studies. J Clin Med. 2016 Nov 24;5(12):107.

[2]. Herbst R, et al. B-cell depletion in vitro and in vivo with an afucosylated anti-CD19 antibody. J Pharmacol Exp Ther. 2010 Oct;335(1):213-22.

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

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