Tusamitamab ravtansine

Cat. No.:	HY-P99542
CAS No.:	2254086-60-5
Target:	Antibody-Drug Conjugates (ADCs); Microtubule/Tubulin
Pathway:	Antibody-drug Conjugate/ADC Related; Cell Cycle/DNA Damage; Cytoskeleton
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	Tusamitamab ravtansine (SAR-408701) is a targeted ADC against tumor cells expressing CEACAM5, composed of a humanized anti-CEACAM5 monoclonal antibody covalently linked to the potent cytotoxic agent, maytansinoid DM4 (HY-12454), via a cleavable linker. Tusamitamab ravtansine has an average drug-to-antibody ratio (DAR) of 3.8[1][2][3].
In Vitro	The antibody component of SAR408701 binds to the extracellular domain of CEACAM5, initiating the internalization of the ADC into the tumor cell, followed by the subsequent release of DM4 within the cytoplasm. DM4 elicits its cytotoxic effects by disrupting microtubule assembly, inducing cell cycle arrest, and initiating apoptosis[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Gazzah A, et al. Safety, pharmacokinetics, and antitumor activity of the anti-CEACAM5-DM4 antibody-drug conjugate tusamitamab ravtansine (SAR408701) in patients with advanced solid tumors: first-in-human dose-escalation study. Ann Oncol. 2022 Apr;33(4):416-425.

[2]. Lorenzo Belluomini, et al. Unlocking New Horizons in Small-Cell Lung Cancer Treatment: The Onset of Antibody-Drug Conjugates. Cancers (Basel). 2023 Nov 10;15(22):5368.

[3]. Ye-Jin Kim, et al. Chimeric antigen receptor-T cells are effective against CEACAM5 expressing non-small cell lung cancer cells resistant to antibody-drug conjugates. Front Oncol. 2023 Feb 27:13:1124039.

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