

Tafasitamab

Cat. No.:	HY-P9981
CAS No.:	1422527-84-1
Target:	Apoptosis
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	Tafasitamab (XmAb5574) is an Fc-modified, humanized monoclonal antibody that binds to the human B-cell surface antigen CD19 ^{[1][2]} .																									
In Vitro	<p>Tafasitamab (XmAb5574) induces cytotoxicity against Mino and Jeko (MCL) cell lines? in an E/T ratio-dependent manner. Tafasitamab (XmAb5574) increases ADCP and antiproliferative? activity. Tafasitamab (XmAb5574) enhances antiproliferative apoptotic activity due to caspase-induced apoptosis^{[1][2]}.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Cytotoxicity Assay^[1]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>NHL cell lines and primary CLL and MCL cells by $\gamma\delta$ T cells</td> </tr> <tr> <td>Concentration:</td> <td></td> </tr> <tr> <td>Incubation Time:</td> <td>2 h</td> </tr> <tr> <td>Result:</td> <td>Induced killing of NHL cell lines and primary CLL and MCL cells by $\gamma\delta$ T cells.</td> </tr> </table> <p>Cell Proliferation Assay^[2]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>SU-DHL-6 cells</td> </tr> <tr> <td>Concentration:</td> <td></td> </tr> <tr> <td>Incubation Time:</td> <td>72 h</td> </tr> <tr> <td>Result:</td> <td>Showed potent antiproliferative effects on tumor cell.</td> </tr> </table> <p>Apoptosis Analysis^[2]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>SU-DHL-6 cells</td> </tr> <tr> <td>Concentration:</td> <td>0-4 ng/mL</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h</td> </tr> <tr> <td>Result:</td> <td>Showed potent antiproliferative effects due to caspase-induced apoptosis</td> </tr> </table>		Cell Line:	NHL cell lines and primary CLL and MCL cells by $\gamma\delta$ T cells	Concentration:		Incubation Time:	2 h	Result:	Induced killing of NHL cell lines and primary CLL and MCL cells by $\gamma\delta$ T cells.	Cell Line:	SU-DHL-6 cells	Concentration:		Incubation Time:	72 h	Result:	Showed potent antiproliferative effects on tumor cell.	Cell Line:	SU-DHL-6 cells	Concentration:	0-4 ng/mL	Incubation Time:	48 h	Result:	Showed potent antiproliferative effects due to caspase-induced apoptosis
Cell Line:	NHL cell lines and primary CLL and MCL cells by $\gamma\delta$ T cells																									
Concentration:																										
Incubation Time:	2 h																									
Result:	Induced killing of NHL cell lines and primary CLL and MCL cells by $\gamma\delta$ T cells.																									
Cell Line:	SU-DHL-6 cells																									
Concentration:																										
Incubation Time:	72 h																									
Result:	Showed potent antiproliferative effects on tumor cell.																									
Cell Line:	SU-DHL-6 cells																									
Concentration:	0-4 ng/mL																									
Incubation Time:	48 h																									
Result:	Showed potent antiproliferative effects due to caspase-induced apoptosis																									

In Vivo

Tafasitamab (SC, once on Day 1, 2.5 µg/kg) inhibits lymphoma growth in disseminated BL mouse xenograft tumor models^[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Disseminated Raji model ^[1] .
Dosage:	2.5 µg/kg
Administration:	Tafasitamab (SC, once on Day 1, 2.5 µg/kg)
Result:	Showed antitumor activity in disseminated Raji model.

Animal Model:	Disseminated Ramos model ^[1] .
Dosage:	10 mg/kg
Administration:	Tafasitamab (IV, on Days 3, 6, 10, 13, 17, and 20 at a dose of 10 mg/kg)
Result:	Showed antitumor activity in disseminated Ramos model.

REFERENCES

[1]. Jung Hyun Her, et al. Tafasitamab mediates killing of B-cell non-Hodgkin's lymphoma in combination with γδ T cell or allogeneic NK cell therapy. *Cancer Immunol Immunother.* 2022 Mar 29.

[2]. Holly M Horton, et al. Potent in vitro and in vivo activity of an Fc-engineered anti-CD19 monoclonal antibody against lymphoma and leukemia. *Cancer Res*

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