

## Tabalumab

Cat. No.:	HY-P99220
CAS No.:	1143503-67-6
Target:	TNF Receptor
Pathway:	Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

### BIOLOGICAL ACTIVITY

<b>Description</b>	Tabalumab (LY2127399) is a human anti-BAFF (B-cell activating factor) monoclonal antibody (IgG4 type) with neutralising activity against membrane bound and soluble BAFF. Tabalumab can be used in studies of autoimmune diseases such as rheumatoid arthritis, renal failure and systemic lupus erythematosus <sup>[1]</sup> .																		
<b>IC<sub>50</sub> &amp; Target</b>	BAFF <sup>[1]</sup> .																		
<b>In Vitro</b>	<p>Tabalumab (1-100 ng/mL; 44 h) neutralizes soluble and membrane-bound BaFF both in T1165.17 cells and (1 µg/mL; 3 days) CD19<sup>+</sup> B-cells<sup>[1]</sup>.</p> <p>Tabalumab (50 µg/mL; 15 min) inhibits BaFF binding to BR3, Tacl, and BcMa in HEK293 cells<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>T1165.17 cells</td> </tr> <tr> <td>Concentration:</td> <td>1-100 ng/mL</td> </tr> <tr> <td>Incubation Time:</td> <td>44 h</td> </tr> <tr> <td>Result:</td> <td>Neutralized tabalumab neutralization of soluble human, cynomolgus monkey, or rabbit BAFF with IC<sub>50</sub> values of 104, 143, and 176 pM in T1165.17 cells, respectively.</td> </tr> </table> <p>Cell Viability Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>CD19<sup>+</sup> B-cells</td> </tr> <tr> <td>Concentration:</td> <td>1 µg/mL</td> </tr> <tr> <td>Incubation Time:</td> <td>3 days</td> </tr> <tr> <td>Result:</td> <td>Demonstrated the ability to neutralize the membrane-bound form of BAFF compared with the soluble form of BAFF.</td> </tr> </table> <p>Cell Viability Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>HEK293 cells (transfected with either BR3, TACI, or BCMA)</td> </tr> </table>	Cell Line:	T1165.17 cells	Concentration:	1-100 ng/mL	Incubation Time:	44 h	Result:	Neutralized tabalumab neutralization of soluble human, cynomolgus monkey, or rabbit BAFF with IC <sub>50</sub> values of 104, 143, and 176 pM in T1165.17 cells, respectively.	Cell Line:	CD19 <sup>+</sup> B-cells	Concentration:	1 µg/mL	Incubation Time:	3 days	Result:	Demonstrated the ability to neutralize the membrane-bound form of BAFF compared with the soluble form of BAFF.	Cell Line:	HEK293 cells (transfected with either BR3, TACI, or BCMA)
Cell Line:	T1165.17 cells																		
Concentration:	1-100 ng/mL																		
Incubation Time:	44 h																		
Result:	Neutralized tabalumab neutralization of soluble human, cynomolgus monkey, or rabbit BAFF with IC <sub>50</sub> values of 104, 143, and 176 pM in T1165.17 cells, respectively.																		
Cell Line:	CD19 <sup>+</sup> B-cells																		
Concentration:	1 µg/mL																		
Incubation Time:	3 days																		
Result:	Demonstrated the ability to neutralize the membrane-bound form of BAFF compared with the soluble form of BAFF.																		
Cell Line:	HEK293 cells (transfected with either BR3, TACI, or BCMA)																		

	Concentration:	50 µg/mL
	Incubation Time:	15 min (pre-treat)
	Result:	Prevented the binding of BAFF to BR3, TACI, or BCMA on the cell surface.
<b>In Vivo</b>	Tabalumab (500 µg/rat; s.c.; single) leads to decreased B-cells and a reduction in non-canonical nF-κB signaling <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Human BAFF Tg mice <sup>[1]</sup> .
	Dosage:	500 µg/rat
	Administration:	Subcutaneous injection, single.
	Result:	Significantly decreased the splenic B-cell count between day 4 and 8. Decreased levels of p52, which returned to near the BAFF Tg level at Day 23.

## REFERENCES

[1]. Manetta J, et al. Generation and characterization of tabalumab, a human monoclonal antibody that neutralizes both soluble and membrane-bound B-cell activating factor. *J Inflamm Res.* 2014 Aug 20;7:121-31.

**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