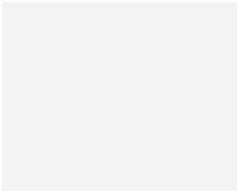


Panobacumab

Cat. No.:	HY-P99214
CAS No.:	885053-97-4
Target:	Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	Panobacumab (KBPA101) is a fully human IgM/ κ monoclonal antibody generated by immortalizing human B lymphocytes against the LPS O polysaccharide of serotype O11 of <i>P. aeruginosa</i> ^[1] .	
In Vitro	<p>Panobacumab (KBPA101) strongly binds to 18 of 20 clinical O11 isolates, functional avidity of KBPA101 to O11 LPS determined by inhibition ELISA is $5.81 \times 10^7 \text{ M}^{-1} \pm 2.8 \times 10^7 \text{ M}^{-1}$^[1].</p> <p>Panobacumab (KBPA101) (0.0001-100 ng/mL; 2 h) specifically mediates complement-dependent opsonophagocytosis of <i>P. aeruginosa</i> serotype O11 with an IC_{50} of 0.16 ng/mL^[1].</p> <p>Panobacumab (KBPA101) (0.1-10 ng/mL) shows direct complement-dependent killing of <i>P. aeruginosa</i> serotype O11 cells in a dose-dependent manner^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>	
In Vivo	<p>Panobacumab (KBPA101) (1-4 mg/kg; i.v.; once) protects mice from systemic infection with <i>P. aeruginosa</i> serotype O11 in a murine burn wound model^[1].</p> <p>Panobacumab (KBPA101) (0.005-0.4 mg/kg; i.v.; once) protects mice from local lung infection with <i>P. aeruginosa</i> serotype O11 in an acute lung infection model^[1].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>	
	Animal Model:	Female NMRI mice, murine burn wound model ^[1]
	Dosage:	1, 2, or 4 mg/kg
	Administration:	Intravenous injection, single dose
	Result:	Significantly reduced mortality compared to untreated control animals administered either immediately or 4 h postchallenge.
	Animal Model:	BALB/c mice, acute lung infection model ^[1]
	Dosage:	0.005 to 0.4 mg/kg
	Administration:	Intravenous injection, single dose
	Result:	Led to rapid clearance of <i>P. aeruginosa</i> from the lung, completely cleared systemic <i>P.</i>



aeruginosa from the spleen, whereas live bacteria were still present in untreated mice at 48 h postchallenge, showed milder macroscopic lung pathology at 6 and 24 h after infection.

REFERENCES

[1]. Horn MP, et al. Preclinical in vitro and in vivo characterization of the fully human monoclonal IgM antibody KBPA101 specific for *Pseudomonas aeruginosa* serotype IATS-O11. *Antimicrob Agents Chemother.* 2010 Jun;54(6):2338-44.

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

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