

Reltecimod

Cat. No.:	HY-P1698
CAS No.:	1447799-33-8
Molecular Formula:	C ₄₆ H ₇₂ N ₁₀ O ₁₅ S
Molecular Weight:	1037.19
Sequence Shortening:	ASPMLVAYDA
Target:	Bacterial; CD28
Pathway:	Anti-infection; Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	Reltecimod (AB-103) is a T-cell-specific surface glycoprotein CD28 (TP44) antagonist. Reltecimod has beneficial effects against different bacterial infections, their exotoxins and endotoxins, and ionizing radiation. Reltecimod modulates the inflammatory response by targeting and attenuating the critical CD28/B7-2 co-stimulatory pathway, without inhibiting it. Reltecimod can be used to research necrotizing soft-tissue infections (NSTIs) ^{[1][2]} .	
IC₅₀ & Target	TP44, Bacteria ^{[1][2]}	
In Vivo	Reltecimod (1.25-5 mg/kg; i.v.) increases the survival rate of mice infected with different bacteria ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Pathogen-free, female BALB/c mice (Acute bacterial peritonitis was induced by i.p. administration with <i>E. coli</i> 018:K1) ^[2]
	Dosage:	1.25 or 5 mg/kg
	Administration:	i.v.; single dosage; at 4 h post infection
	Result:	Resulted in 100% survival at single dosage of 5 mg/kg, at day 6. Resulted in 70% survival at 4 dosage (at 1, 12, 24 and 36 h post infection) of 1.25 mg/kg, at day 6.
	Animal Model:	Pathogen-free, female BALB/c mice (NSTI induced by thigh i.m. administration with <i>Streptococcus pyogenes</i>) ^[2]
	Dosage:	2.5 or 5 mg/kg
	Administration:	i.v.; single dosage; at 1 h, or at 1 h and 12 or 72 h post infection
	Result:	Resulted in 65% survival at single dosage of 2.5 mg/kg, at day 8. Resulted in 30% survival at two dosage (1 and 12 h post infection) of 2.5 mg/kg, at day 8. Resulted in 90% survival at single dosage (1 h post infection) of 5 mg/kg, at day 6.

Animal Model:	Pathogen-free, female BALB/c mice [Cecal ligation and puncture (CLP) model] ^[2]
Dosage:	1.25, 2.5, or 5 mg/kg
Administration:	i.v.; single dosage
Result:	Increased day 7 survival by up to 100%.

REFERENCES

[1]. Shirvan, A., et al. Reltecimod. T-cell-specific surface glycoprotein CD28 (TP44) antagonist, CD28 homodimer interface mimetic peptide, Treatment of necrotizing soft-tissue infection. *Drugs Fut* 2018, 43(4): 243

[2]. Edgar, R., Tarrio, M.L., Maislin, G. et al. Treatment with One Dose of Reltecimod is Superior to Two Doses in Mouse Models of Lethal Infection. *Int J Pept Res Ther* 26, 1669–1683 (2020).

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

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