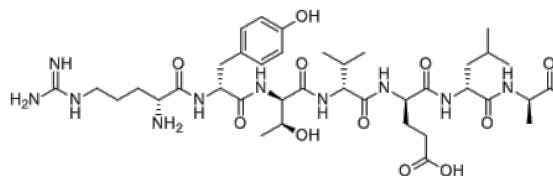


Product Name : Rytvela
Cat. No. : PC-49391
CAS No. : 1200829-06-6
Molecular Formula : C₃₈H₆₂N₁₀O₁₂
Molecular Weight : 850.972
Target : Interleukin Receptor
Solubility : 10 mM in DMSO



Biological Activity

Rytvela (Peptide 101.10, d-(RYTVELA)) is a potent, selective, allosteric negative modulator (antagonist) of IL-1 receptor I (**IL-1RI**), inhibits dose-dependently IL-1-induced PGE₂ formation (IC₅₀= 0.5 nM) and IL-1-induced human thymocyte (TF-1 cell) proliferation (IC₅₀=2 nM).

[¹²⁵I]101.10 binds specifically in a saturable manner with an affinity constant (K_D) of 5 nM to thymocytes containing IL-1RI.

Rytvela (Peptide 101.10) diminished maximum TF-1 proliferation induced by IL-1 with an estimated pA₂ value of 5 nM.

Rytvela (Peptide 101.10) is selective for IL-1, and inactive against homologous cytokine of the IL-1 family IL-18.

Rytvela (Peptide 101.10) demonstrated robust in vivo effects in models of hyperthermia and inflammatory bowel disease as well as topically in contact dermatitis, superior to corticosteroids and IL-1ra; Rytvela (Peptide 101.10) did not bind to IL-1RI deficient cells and was ineffective in vivo in IL-1RI knockout mice.

References

Quiniou C, et al. *J Immunol.* 2008 May 15;180(10):6977-87.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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