

BIO-1211

Chemical Properties

CAS No. : 187735-94-0

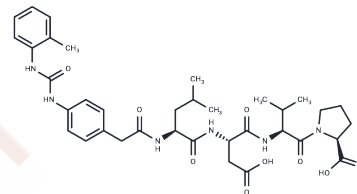
Formula: C₃₆H₄₈N₆O₉

Molecular Weight: 708.8

Keep away from moisture

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	BIO-1211 is a more potent inhibitor of $\alpha 4\beta 1$ (VLA-4, IC ₅₀ = 4 nM) over $\alpha 4\beta 7$ (IC ₅₀ = 2 μ M).
Targets(IC ₅₀)	Integrin
In vitro	BIO-1211 does not show activity against $\alpha 1\beta 1$, $\alpha 5\beta 1$, $\alpha 6\beta 1$, $\alpha L\beta 2$ and $\alpha IIb\beta 3$ [2].
In vivo	In naive, C57BL/6 mice, BIO-1211 exhibited a considerable depletion in the EAE clinical score, which correlated with decreased expression of TNF- α , IL-17, IFN- γ and pervade of CD11b+ and CD45+ cells into the cerebral cortex. BIO-1211 resulted in reduced cytokines expression, leukocyte trafficking, and inhibition of inflammatory responses in a dose-independent manner[1].

Solubility Information

Solubility	DMSO: 250 mg/mL (352.71 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (7.05 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4108 mL	7.0542 mL	14.1084 mL
5 mM	0.2822 mL	1.4108 mL	2.8217 mL
10 mM	0.1411 mL	0.7054 mL	1.4108 mL
50 mM	0.0282 mL	0.1411 mL	0.2822 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Nourollah Ramroodi, et al. Prophylactic Effect of BIO-1211 Small-Molecule Antagonist of VLA-4 in the EAE Mouse Model of Multiple Sclerosis. *Immunol Invest.* 2015;44(7):694-712.

K c Lin, et al. Selective, tight-binding inhibitors of integrin alpha4beta1 that inhibit allergic airway responses. *J Med Chem.* 1999 Mar 11;42(5):920-34.

L L Chen, et al. Multiple activation states of integrin alpha4beta1 detected through their different affinities for a small molecule ligand. *J Biol Chem.* 1999 May 7;274(19):13167-75.

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