**Proteins** 

## **Product** Data Sheet

## **Ex26**

Molecular Weight:

Cat. No.: HY-117213 CAS No.: 1233332-37-0

Molecular Formula:  $C_{28}H_{28}ClFN_2O_3$ 

Target: LPL Receptor Pathway: GPCR/G Protein

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

494.98

## **BIOLOGICAL ACTIVITY**

Description Ex26 (S1P1-IN-Ex26) is a potent and selective sphingosine 1-phosphate receptor 1 (S1P1) antagonist (IC50=0.93 nM). Ex26 shows >3,000-fold selectivity for S1P<sub>1</sub> over other Sphingosine 1-phosphate receptors. Ex26 can be used in experimental autoimmune encephalomyelitis reseach $^{[1]}$ .

IC50: 0.93 nM (S1P<sub>1</sub>)<sup>[1]</sup> IC<sub>50</sub> & Target

> Ex26 (0-10 µM; 1 h) treatment shows excellent selectivity for S1P<sub>1</sub> over other Sphingosine 1-phosphate receptors<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

> > Cell Viability Assay<sup>[1]</sup>

Cell Line:	U2OS cells, and Chinese hamster ovary cells
Concentration:	0-10 μΜ
Incubation Time:	1 hour
Result:	Confirmed a potent and selective antagonist of ${\rm S1P_1}$ (IC $_{50}$ =0.93 nM).

In Vivo

In Vitro

Ex26 (i.p.; 3 mg/kg; once daily; 3 d) treatment disrupts S1P<sub>1</sub> signaling inhibiting the lymphocyte and thymocyte egress<sup>[1]</sup>. Ex26 (i.p.; 30 mg/kg; once daily; 15 d) treatment alleviates experimental autoimmune encephalomyelitis by S1P1 antagonism[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Eight-week-old male C57Bl/6J mice $^{[1]}$
Dosage:	3 mg/kg
Administration:	Intraperitoneal injection; 3 mg/kg; once daily; 3 days
Result:	Induced lymphocyte sequestration at low doses, possessing an ED <sub>50</sub> of 0.06 mg/kg after 2 hours treatment. Led to significant retention of T and B cells within the lymph nodes and significant decreases in T and B cells within the spleen.

Animal Model:	Eight-week-old male C57Bl/6J mice induced with experimental autoimmune encephalomyelitis $^{ m [1]}$
Dosage:	30 mg/kg
Administration:	Intraperitoneal injection; 30 mg/kg; once daily; 15 days
Result:	Inhibited both lymphocyte infiltration and destruction of the white matter in the spinal cord of mice euthanized at the end of the experiment.

## **REFERENCES**

[1]. Stuart M Cahalan, et al. Sphingosine 1-phosphate receptor 1 (S1P(1)) upregulation and amelioration of experimental autoimmune encephalomyelitis by an S1P(1) antagonist. Mol Pharmacol. 2013 Feb;83(2):316-21.

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

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