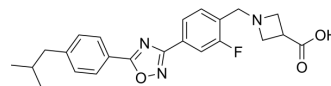


Icanbelimod

| | | | |
|--------------------|--|-------|---------|
| Cat. No.: | HY-101265 | | |
| CAS No.: | 1514888-56-2 | | |
| Molecular Formula: | C ₂₃ H ₂₄ FN ₃ O ₃ | | |
| Molecular Weight: | 409.45 | | |
| Target: | LPL Receptor | | |
| Pathway: | GPCR/G Protein | | |
| Storage: | Powder | -20°C | 3 years |
| | | 4°C | 2 years |
| | In solvent | -80°C | 2 years |
| | | -20°C | 1 year |



SOLVENT & SOLUBILITY

In Vitro

DMSO : 6.8 mg/mL (16.61 mM; Need ultrasonic and warming)

| Concentration | Mass | | | |
|---------------|-----------|------------|------------|--|
| | 1 mg | 5 mg | 10 mg | |
| 1 mM | 2.4423 mL | 12.2115 mL | 24.4230 mL | |
| 5 mM | 0.4885 mL | 2.4423 mL | 4.8846 mL | |
| 10 mM | 0.2442 mL | 1.2212 mL | 2.4423 mL | |

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Icanbelimod (S1p receptor agonist 1) is a potent and orally active S1P receptor agonist, exhibits an activity of inducing S1P1 internalization (EC₅₀=9.83 nM). Icanbelimod has the potential for the study of arthritis and EAE (experimental autoimmune encephalitis). Icanbelimod is extracted from patent WO2015039587A1, Compound 2.

IC₅₀ & Target

EC₅₀: 9.83 nM (S1P1 internalization)^[1]

In Vivo

Icanbelimod (oral administration; 0.01 mg/kg-1 mg/kg) at all dose is active, and only a dose of 0.01 mg/kg is required to observe a decrease in the number of peripheral blood lymphocytes by more than 50% and a decrease in the 1 mg/kg dose. Besides, this compound is lymphocyte-specific, which dose not significantly alter the number of peripheral monocytes and other white blood cells in SD rats^[1].

Icanbelimod (oral administration; 3 mg/kg; 12 days) is has been proved to block lymphocyte efflux. In the development of type II collagen-induced arthritis in rat model, compound 2 is effective in inhibiting the development of joint swelling in arthritis and joint structure destruction^[1].

Icanbelimod (oral administration; 0.3-1mg/kg; 30 days; once daily) inhibits the development of experimental autoimmune encephalitis (EAE) as a dose-dependent manner in mice model^[1].

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

| | |
|-----------------|--|
| Animal Model: | Lewis rats ^[1] |
| Dosage: | 3 mg/kg |
| Administration: | Oral administration |
| Result: | Decreased the severity score of arthritis in the four-legged rats. |
| <hr/> | |
| Animal Model: | Female C57BL/6 mice ^[1] |
| Dosage: | 0.03, 0.1, and 1 mg/kg |
| Administration: | Oral administration |
| Result: | Decreased the severity score of EAE in MOG 35-55 induced mice. |

REFERENCES

[1]. Zhenwei, et al. Immune adjustment compound, use thereof and pharmaceutical composition comprising same. Patent WO2015039587A1

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

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