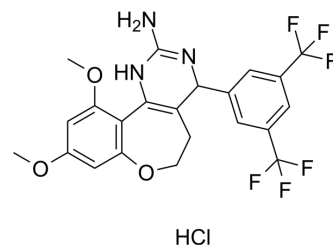


Anti-neuroinflammation agent 1

Cat. No.:	HY-155762
CAS No.:	2968412-77-1
Molecular Formula:	C ₂₂ H ₂₀ ClF ₆ N ₃ O ₃
Molecular Weight:	523.86
Target:	NOD-like Receptor (NLR); Interleukin Related
Pathway:	Immunology/Inflammation
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Anti-neuroinflammation agent 1 is a potent anti-neuroinflammation agent that regulates polarization BV2 microglia cells from M1 phenotype to M2 phenotype ^[1] .
In Vitro	Anti-neuroinflammation agent 1 (BMP 29) shows more potent anti-neuroinflammatory activity and no toxicity to BV2 microglia cells in vitro. Anti-neuroinflammation agent 1 significantly reduces the number of M1 phenotype of microglia cells, but significantly increases the number of M2 phenotype of microglia cells in lipopolysaccharide (LPS)-induced BV2 microglia cells. Anti-neuroinflammation agent 1 significantly reduces the secretion of inflammatory cytokines (IL-18, IL-1β, TNF-α), but increases the secretion of anti-inflammatory cytokines (IL-10) from LPS-induced BV2 microglia cells. Also, Anti-neuroinflammation agent 1 inhibits the NOD-like receptor NLRP3 inflammasome formation, and down-regulated the expression of M2 isoform of pyruvate kinase in LPS-induced BV2 microglia cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	In mice, Anti-neuroinflammation agent 1 (BMP 29) reduces the neuroinflammation in cuprizone-induced inflammatory and demyelinating mice by reducing the expression of inducible nitric-oxide synthase, but increased the expression of CD206 ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Yang Yang, et al. Discovery of anti-neuroinflammatory agents from 1,4,5,6-tetrahydrobenzo[2,3]oxepino[4,5-d]pyrimidin-2-amine derivatives by regulating microglia polarization. *Eur J Med Chem.* 2023 Jul 27;259:115688.

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

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