

Product Name : FPTQ

Synonyms : —

Cat No. : M22082

CAS Number : 1025802-62-3

Molecular Formula : C₁₇H₁₂FN₅

Formula Weight : 305.32

Chemical Name : —

Description : FPTQ is an antagonist of mGluR1. FPTQ is a synthetic isoquinoline derivative. Neutrophils translocation in the zebrafish tail-transected model was inhibited by FPTQ. Neutrophil aggregation was also inhibited by FPTQ in the LPS-stimulated zebrafish model. Decreased mRNA expression of the pro-inflammatory cytokine genes, interleukin-1 β (il-1 β) and interleukin-6 (il-6), was found in zebrafish larvae injected with FPTQ. Additionally, production of nitric oxide was inhibited by FPTQ in RAW264.7 macrophage cells treated with LPS. Moreover, the mRNA expression of IL-1 β and IL-6 suppressed by FPTQ treatment in RAW264.7 macrophage cells, and an enzyme immunoassay showed that FPTQ suppressed the secretion of IL-1 β and IL-6 in RAW264.7 cells. These results demonstrate that FPTQ reduced inflammatory responses and, therefore, suggest that it may be effective as an anti-inflammatory agent.

Pathway : Neuroscience

Target : GluR

Receptor : mGluR1

Solubility : —

SMILES : Cc1c(nnn1-c1cccnc1F)-c1ccc2cccnc2c1

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Geum Ran Kim, Jung Yoon Yang, Kyu-Seok Hwang, et al. Anti-inflammatory effect of a novel synthetic compound 1-((4-fluorophenyl)thio)isoquinoline in RAW264.7 macrophages and a zebrafish model. [J]. Fish & shellfish immunology, 2019.