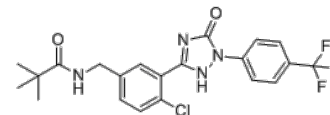


Product Name : Zaloglanstat
Cat. No. : PC-38688
CAS No. : 1513852-12-4
Molecular Formula : C₂₁H₂₀ClF₃N₄O₂
Molecular Weight : 452.862
Target : PGE synthase
Solubility : 10 mM in DMSO



1. Sant S, et al. **Osteoarthritis Cartilage** 2018, 26, S351– S352, DOI: 10.1016/j.joca.2018.02.698

Biological Activity

Zaloglanstat (ISC-27864, GRC-27864) is a potent, selective, non-opioid and orally active microsomal prostaglandin E synthase-1 (**mPGES-1**) inhibitor with IC₅₀ of 5 nM (human mPGES-1).

Zaloglanstat (ISC-27864, GRC-27864) shows no significant inhibitory effect on COX-1/2.

Zaloglanstat inhibits PGE₂ release in pig and dog whole blood with IC₅₀s of 161 nM and 154 nM, respectively.

Zaloglanstat blocks the conversion of arachidonic acid metabolite prostaglandin PGH₂ to prostaglandin PGE₂, thereby inhibiting inflammation-related PGE₂ overproduction and reducing inflammatory responses and pain.

Zaloglanstat inhibits IL-1β-induced PGE₂ release in A549 cells and human synovial fibroblasts in vitro.

Zaloglanstat exhibits significant analgesic efficacy in preclinical models for osteoarthritis and inflammatory arthritis.

References

