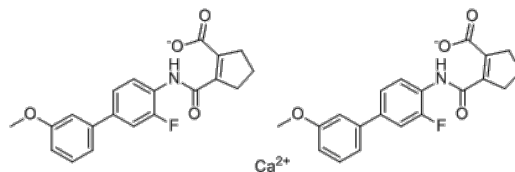

Product Name	: Vidofludimus calcium
Cat. No.	: PC-49176
CAS No.	: 1354012-90-0
Molecular Formula	: C ₂₀ H ₁₈ FNO ₄ ·1/2Ca
Molecular Weight	: 375.40
Target	: Other Targets
Solubility	: 10 mM in DMSO



Biological Activity

Vidofludimus calcium (IMU-838) is a selective and potent second-generation dihydroorotate dehydrogenase (DHODH) inhibitor with IC₅₀ of 160 nM, shows anti-SARS-CoV-2 activity with EC₅₀ of 7.6 μM in Vero cells.

Vidofludimus inhibits T cell proliferation with EC₅₀ of 11.8 μM, with a similar effect on CpG ODN 2006-PTO dependent B cell proliferation.

Vidofludimus is specific for human DHODH and does not have off-target effect on kinases, is about 7.5-fold and about 64.4-fold more active on human DHODH as compared to rat DHODH and mouse DHODH, respectively.

Vidofludimus inhibits specifically IL-17F, IL-17A and IFN-γ expression in PBMCs.

Vidofludimus is 2.6 times more potent in inhibiting DHO oxidation by human DHODH compared to teriflunomide (IC₅₀=420 nM).

Vidofludimus shows inhibition of rat EAE motor signs in a rat experimental autoimmune encephalomyelitis (EAE) model.

Vidofludimus exerts a broad-spectrum activity against a selection of major human pathogenic viruses.

References

Muehler A, et al. Mult Scler Relat Disord. 2020 Aug;43:102129.

Hahn F, et al. Viruses. 2020 Dec 5;12(12):1394.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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