

Product Datasheet

ABX464

Catalog No. **BP-01860** · CAS **1258453-75-6** · Form **free base** · Physical state **solid** · Color **White to off-white** · Version **1.0** · Revision **2026-09-07**

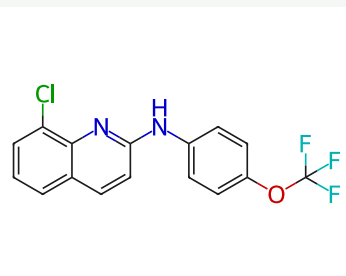
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Target HIV	Research area Infection
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Molecular formula **C₁₆H₁₀ClF₃N₂O**

Molecular weight **338.7120**

STRUCTURE



DESCRIPTION

ABX464 is a potent anti-HIV agent. ABX464 inhibits HIV-1 replication in stimulated peripheral blood mononuclear cells (PBMCs) with an IC₅₀ ranging between 0.1 μM and 0.5 μM.

BIOLOGICAL ACTIVITY

In Vitro

Obefazimod inhibits HIV-1 production in PBMC- and macrophages-infected cells. Obefazimod has a strong inhibitory effect for all HIV-1 subtypes tested including subtype B, C and recombinant viruses. Obefazimod also very efficiently inhibits the replication of viral strains harbouring mutations that confer resistance to different therapeutic agents in vitro. While the antiviral drug 3TC is not highly active on K65R and M184V mutant strains, both strains are inhibited by Obefazimod. To generalize the effect of Obefazimod on HIV-1 replication in other primary cells, cells are treated with between 0.01 μM up to 30 μM concentrations of Obefazimod and p24 antigen levels are monitored in culture supernatants over a 12 days period. Obefazimod efficiently blocks virus replication in a dose-dependent manner with an IC₅₀ ranging between 0.1 μM and 1 μM.

In Vivo

Humanized mice reconstituted with human lymphoid cells provide rapid, reliable, reproducible experimental systems for testing the efficacy of Obefazimod in vivo. In the initial setting, SCID mice are reconstituted with PBMCs and then infected with the HIV-1 strain JR-CSF. Mice are treated twice a day (b.i.d) for 15 days by oral gavage with 20 mg/kg of Obefazimod. Measures of viral RNA show that the oral treatment with Obefazimod is able to significantly reduce the viral load over a period of 15 days of treatment. FACS analysis of blood samples show that treatment with Obefazimod prevents depletion of CD4⁺ cells following infection of reconstituted mice and thereby restores the CD8⁺/CD4⁺ ratio back to that of non-infected mice.

SOLUBILITY

Soluble in DMSO > 100 mg/mL

REFERENCES

[1]. Campos N, et al. Long lasting control of viral rebound with a new drug ABX464 targeting Rev-mediated viral RNA biogenesis. *Retrovirology*. 2015 Apr 9;12:30.

Tel: +86 20 31130026 · Fax: +86 20 36822386 · tech@biochemprobe.com · www.biochemprobe.com

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