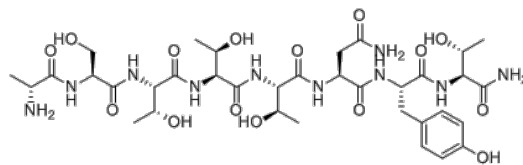


Product Name : DAPTA
Cat. No. : PC-21104
CAS No. : 106362-34-9
Molecular Formula : C₃₅H₅₆N₁₀O₁₅
Molecular Weight : 856.89
Target : Chemokine Receptor (CCR and CXCR)
Solubility : 10 mM in DMSO



Biological Activity

DAPTA (D-ala-peptide T-amide, Adaptavir) is an HIV gp120-derived CCR5 entry inhibitor, inhibits CCR5-mediated monocyte migration and attenuates neuroinflammation, shows potent anti-HIV activities.

DAPTA potently inhibits specific CD4-dependent binding of gp120 BaI (IC₅₀ = 0.06 nM) and CM235 (IC₅₀ = 0.32 nM) to CCR5.

DAPTA (1 nM) blocks formation of the gp120/sCD4 complex with CCR5. DAPTA inhibits the binding of gp120BaL/sCD4 to CCR5 (Cf2Th/synR5) cells with IC₅₀ of 55 pM.

DAPTA administration significantly decreased marble burying and repetitive behavior in BTBR mice.

DAPTA treatment inhibited CCR5+, CD4+CCR5+, CCR5+IL-6+, CCR5+IL-9+, CCR5+IL-17A+, CCR5+RORγT+, and upregulated CCR5+IL-10+, and CCR5+Foxp3+ production.

DAPTA downregulated IL-6, IL-9, IL-17A, and RORγT, and increased IL-10 and Foxp3 protein and mRNA expression.

References

Ahmad SF, et al. Eur J Pharmacol. 2019 Mar 5;846:100-108.

Pollicita M, et al. Antivir Chem Chemother. 2007;18(5):285-95.

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

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