Peptide T

Cat. No.: HY-P0272  
CAS No.: 106362-32-7  
Molecular Formula: C₃₅H₅₅N₉O₁₆  
Molecular Weight: 857.86  
Sequence: Ala-Ser-Thr-Thr-Thr-Asn-Tyr-Thr  
Sequence Shortening: ASTTNYT  
Target: HIV  
Pathway: Anti-infection  
Storage: Please store the product under the recommended conditions in the COA.

**BIOLOGICAL ACTIVITY**

**Description**  
Peptide T is an octapeptide from the V2 region of HIV-1 gp120. Peptide T is a ligand for the CD4 receptor and prevents binding of HIV to the CD4 receptor.

**IC₅₀ & Target**  
CD4, HIV[1]

**In Vitro**  
Peptide T acts to block viral entry as it inhibits in the MAGI cell assay and blocks infection in the luciferase reporter assay using HIV virions pseudotyped with ADA envelope. Peptide T selectively inhibits HIV replication using chemokine receptor CCR5 compared to CXC4[2]. Peptide T at 10⁻⁸ M induces IL-10 production by the human Th2 cell line and PBMC. Also peptide T at 10⁻⁹ M concentration significantly inhibits IFN-g production by PBMC[3].

**In Vivo**  
Peptide T is administered subcutaneously at different doses and phases of the experimental autoimmune encephalomyelitis (EAE) disease, but Peptide T neither prevents nor ameliorates EAE[4].

**PROTOCOL**

**Cell Assay** [3]  
Peripheral blood mononuclear cells are stimulated with PHA (5 mg/mL) along with various concentrations of peptide T (10⁻⁶-10⁻¹² M) for 48 h at 37°C. Supernatants are collected and frozen until analysis[3].  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

**Animal Administration** [4]  
Peptide T (125, 250, 500, 800 μg) is randomly given subcutaneously to Female Lewis rats aged 6-8 weeks in the hind foot flanks in a final volume of 0.2 mL. Control animals receive the same volume of saline alone[4].  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

**REFERENCES**

