

Product Name	: TAT
Synonyms	: —
Cat No.	: M22350
CAS Number	: 191936-91-1
Molecular Formula	: C64H118N32O14
Formula Weight	: 1559.83
Chemical Name	: —
Description	<p>TAT (YGRKKRRQRRR) is derived from the transactivator of transcription (TAT) of human immunodeficiency virus-1 (HIV-1) and is a cell-penetrating peptide. TAT can increase the yields and the solubility of heterologous proteins[1]. TAT (YGRKKRRQRRR) represents amino acids 47-57 of the human immunodeficiency virus type I (HIV-1) TAT protein. The positively charged protein transduction domain of the HIV-1 TAT protein (TAT-PTD; residues 47-57 of TAT) rapidly translocates across the plasma membrane of living cells. TAT (YGRKKRRQRRR; TAT-PTD) can cross the hydrophobic lipid bilayer of a cell membrane simply by passive diffusion.</p>
Pathway	: Microbiology/Virology
Target	: HIV
Receptor	: HIV-1
Solubility	: H ₂ O
SMILES	<pre> NCCCC[C@H](NC(=O)[C@H](CCCNC(N)=N)NC(=O)CNC(=O)[C@@H](N)Cc1ccc(O)cc1)C(=O)N[C@@H]((CCCCN)C(=O)N[C@@H](CCCNC(N)=N)C(=O)N[C@@H](CCCNC(N)=N)C(=O)N[C@@H](CCC(N)=O)C(=O)N[C@@H]((CCCNC(N)=N)C(=O)N[C@@H](CCCNC(N)=N)C(=O)N[C@@H](CCCNC(N)=N)C(=O) </pre>
Storage	: (-20°C)
Stability	: ≥ 2 years
Reference	:

1.Ziegler A, et al. Interaction of the protein transduction domain of HIV-1 TAT with heparan sulfate: binding mechanism and thermodynamic parameters. Biophys J. 2004 Jan;86(1 Pt 1):254-63.