

TAT

Cat. No.:	HY-P0281
CAS No.:	191936-91-1
Molecular Formula:	$C_{64}H_{118}N_{32}O_{14}$
Molecular Weight:	1559.83
Sequence:	Tyr-Gly-Arg-Lys-Lys-Arg-Arg-Gln-Arg-Arg-Arg
Sequence Shortening:	YGRKKRRQRRR
Target:	HIV
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	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] .
IC ₅₀ & Target	HIV-1
In Vitro	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 ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[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.

Caution: Product has not been fully validated for medical applications. For research use only.

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