



Product Data Sheet

Product Name:	TAT (47-57)	
Catalog Number:	AS-60023-1 (1 mg) AS-60023-5 (5 mg)	Lot Number: See label on vial
Sequence:	H-Tyr-Gly-Arg-Lys-Lys-Arg-Arg-Gln-Arg-Arg-Arg-OH (3-letter code) YGRKKRRQRRR (1-letter code)	
Molecular Weight:	1559.9	
Peptide Purity:	>95%	
Appearance:	Lyophilized white powder	

Peptide Reconstitution: TAT (47-57) peptide is freely soluble in water.

Storage: TAT (47-57) peptide is shipped at ambient temperature. Upon receipt, store lyophilized peptide at -20°C or lower. Reconstituted peptide can be aliquoted and stored at -20°C or lower.

Description: This is the most characterized fragment of the HIV transactivator protein (TAT). This arginine-rich TAT peptide penetrates plasma membrane directly, but not through endocytosis. Ref: Wang, H. et al. *J. Clin. Invest.* **109**, 1463 (2002); Ziegler et al. *Biochem.* **44**, 138 (2005); Wender, PA. et al. *Proc. Natl. Acad. Sci. USA* **97**, 13003 (2000).

Additional Information: Listed below are relevant information that may provide a guideline on how to use this product. End users will have to adapt to their own specific applications.

All the animal studies were done in accordance with protocol no. 00-084-09 obtained from Institutional Animal Care and Use Committee. For biodistribution studies, 4×10^6 LS174T cells, a human colon carcinoma cell line, were implanted s.c. in female athymic mice (*nu/nu*; 4-6 weeks old; Charles River, Wilmington, MA). The mice were used 10 to 14 days following implantation (tumor volume, $\approx 200\text{-}300 \text{ mm}^3$). Biodistribution studies were done after an injection of $[^{125}\text{I}]\text{sc}(\text{Fv})_2$ (5 $\mu\text{Ci}/\text{animal}$) via the tail vein either alone or in conjunction with 200 μL of 12.5 $\mu\text{mol}/\text{L}$ penetratin (RQIKIWFQNRRMKWKK) or TAT (YGRKKRRQRR) peptides (Anaspec, San Jose, CA)- [Jain, M. et al. *Cancer Res.* **65**, 7840 \(2005\).](#)

Published Citations:

Jain, M. et al. *Cancer Res.* **65**, 7840 (2005).
Matsushita, K. et al. *Mol. Pharmacol.* **67**, 1137 (2005).

Related Products:

Name	Cat #	Size
FITC-LC-TAT (47-57)	AS-27042	0.5 mg
FITC-LC-YGRKKRRQRRR-NH2	AS-27043	1 mg

TAT (47-57), TAMRA-labeled TAMRA-YGRKKRRQRRR	AS-61211	1 mg
TAT (47-57), FAM-labeled FAM-YGRKKRRQRRR	AS-61210	1 mg
TAT (47-57) GGG-Cys(Npys) YGRKKRRQRRRGGG-C(Npys)-NH2	AS-61215	1 mg
Cys(Npys)-TAT (47-57), FAM-labeled C(Npys)YGRKKRRQRRR-K(FAM)-NH2	AS-61213	1 mg
Cys(Npys)-TAT (47-57) C(Npys)YGRKKRRQRRR-NH2	AS-61214	1 mg
Biotin-TAT (47-57) Biotin-YGRKKRRQRRR	AS-61209	1 mg
Cys-TAT (47-57) CYGRKKRRQRRR-NH2	AS-61212	1 mg

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