TfR-T12

Cat. No.:	HY-P2297
CAS No.:	344618-30-0
Molecular Formula:	$C_{71}H_{99}N_{19}O_{15}S$
Molecular Weight:	1490.73
Sequence:	Thr-His-Arg-Pro-Pro-Met-Trp-Ser-Pro-Val-Trp-Pro
Sequence Shortening:	THRPPMWSPVWP
Target:	Transferrin Receptor
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	TfR-T12 is a BBB-penetrated transferrin receptor (TfR) binding peptide, displaying a binding affinity in the nM range[1][2].
In Vitro	TfR-T12 binds to the TfR and is subsequently internalized into TfR-expressing cells[1]. TfR-T12 is a synthetic peptide obtained by phage display, and is able to bind a different site on TfRs compared with transferrin. TfR-T12 can be chemically conjugated with a pegylated lipid derivative, 3-(N-succinimidyloxyglutaryl)aminopropyl- polyethyleneglycol(2000)- carbamyl distearoyl phosphatidylethanolamine (NHS-PEG2000-DSPE), and used as a functional material to construct the multifunctional lipid vesicles[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Carmen Wängler, et al. In Vitro and Initial in Vivo Evaluation of (68)Ga-labeled Transferrin Receptor (TfR) Binding Peptides as Potential Carriers for Enhanced Drug Transport Into TfR Expressing Cells. Mol Imaging Biol. 2011 Apr;13(2):332-41.

[2]. Li-Min Mu, et al. Lipid Vesicles Containing Transferrin Receptor Binding Peptide TfR-T 12 and Octa-Arginine Conjugate stearyl-R 8 Efficiently Treat Brain Glioma Along With Glioma Stem Cells. Sci Rep. 2017 Jun 14;7(1):3487.

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

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA