Prosaptide Tx14(A)

MedChemExpress

®

| Cat. No.: | HY-P1342 | | | |
|----------------------|---|--|--|--|
| CAS No.: | 196391-82-9 | | | |
| Molecular Formula: | $C_{69}H_{110}N_{16}O_{26}$ | | | |
| Molecular Weight: | 1579.7 | | | |
| Sequence: | ۲hr-Ala-Leu-Ile-Asp-Asn-Asn-Ala-Thr-Glu-Glu-Ile-Leu-Tyr | | | |
| Sequence Shortening: | TALIDNNATEEILY | | | |
| Target: | Others | | | |
| Pathway: | Others | | | |
| Storage: | Sealed storage, away from moisture | | | |
| | Powder -80°C 2 years | | | |
| | -20°C 1 year | | | |
| | * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture) | | | |

SOLVENT & SOLUBILITY

| In Vitro | DMSO : ≥ 100 mg/mL (63.30 mM) * "≥" means soluble, but saturation unknown. | | | | | | |
|----------|--|-------------------------------|-----------|-----------|-----------|--|--|
| | Preparing Stock Solutions | Solvent Mass Concentration | 1 mg | 5 mg | 10 mg | | |
| | | 1 mM | 0.6330 mL | 3.1652 mL | 6.3303 mL | | |
| | | 5 mM | 0.1266 mL | 0.6330 mL | 1.2661 mL | | |
| | | 10 mM | 0.0633 mL | 0.3165 mL | 0.6330 mL | | |
| | Please refer to the solubility information to select the appropriate solvent. | | | | | | |
| In Vivo | 1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 2.5 mg/mL (1.58 mM); Suspended solution; Need ultrasonic | | | | | | |

| BIOLOGICAL ACTIVITY | | | | |
|---------------------|---|--|--|--|
| Description | Prosaptide Tx14(A), a prosaposin-derived peptide, is a potent GPR37L1 and GPR37 agonist with EC ₅₀ s of 5 and 7 nM, respectively. Prosaptide Tx14(A) increases both ERK1 and ERK2 phosphorylation in Schwann cells ^{[1][2]} . | | | |
| In Vitro | Prosaptide Tx14(A) promotes the endocytosis of GPR37 and GPR37L1, bound to both receptors and activated signaling in a GPR37- and GPR37L1-dependent manner. Prosaptide Tx14(A) is the active fragment of the secreted neuroprotective and glioprotective factor prosaposin (also known as sulfated glycoprotein-1) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. | | | |

REFERENCES

[1]. Meyer RC, et al. GPR37 and GPR37L1 are receptors for the neuroprotective and glioprotective factors prosaptide and prosaposin. Proc Natl Acad Sci U S A. 2013;110(23):9529-9534.

[2]. Campana WM, et al. Prosaptide activates the MAPK pathway by a G-protein-dependent mechanism essential for enhanced sulfatide synthesis by Schwann cells. FASEB J. 1998;12(3):307-314.

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