

Product Data Sheet

Inhibitors

Screening Libraries

Proteins

TWIK-1/TREK-1-IN-1

Cat. No.: HY-149536 **CAS No.:** 1440532-30-8

Molecular Weight:

Target: Potassium Channel

Pathway: Membrane Transporter/Ion Channel

395.42

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

QH OH

BIOLOGICAL ACTIVITY

Description	TWIK-1/TREK-1-IN-1 (compound 2a) is an inhibitor of the TWIK-related potassium channel (Potassium Channel) TREK-1. TREK-1 contains a two-pore domain potassium (K2p) channel that dimerizes into TREK-1 homodimer and TWIK-1/TREK-1 heterodimer, and is an important antidepressant target. TWIK-1/TREK-1-IN-3 targets TREK-1 homodimer and TWIK-1/TREK-1 heterodimer with IC $_{50}$ s of 9.36 μ M and 14.6 μ M, respectively, and has antidepressant-like effects [1].
IC ₅₀ & Target	IC50: 9.36 μ M (TREK-1/TREK-1), 14.6 μ M (TWIK-1/TREK-1) $^{[1]}$

REFERENCES

[1]. Lee EH, et al. Novel potent blockers for TWIK-1/TREK-1 heterodimers as potential antidepressants. Biomed Pharmacother. 2023 Sep;165:115139...

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