Recombinant Mouse SLITRK3 His-tag

Catalog Number: 1639-SK

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived mouse SLITRK3 protein Thr30-Ser655, with a C-terminal 6-His tag Accession # Q810B9
N-terminal Sequence Analysis	Thr30
Predicted Molecular Mass	72 kDa

SPECIFICATIONS

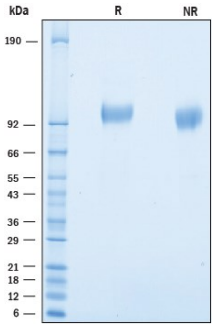
SDS-PAGE	94-105 kDa, reducing conditions
Activity	Measured by its ability to inhibit neurite outgrowth of dissociated E13 chick embryonic dorsal root ganglia (DRG) neurons. Able to significantly inhibit neurite outgrowth when immobilized as a 3 µL droplet containing 200 ng of protein on a nitrocellulose-coated microplate.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 3 months, ≤ -20 °C under sterile conditions after reconstitution.

DATA

SDS-PAGE



2 µg/lane of Recombinant Mouse SLITRK3 was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 94-105 kDa.

BACKGROUND

SLITRK3 (Slit and Trk-like family member 3) is an approximately 120 kDa type I transmembrane member of the SLITRK family of proteins which contain a Slit-like extracellular region and a Trk-like cytoplasmic region (1). The extracellular domain (ECD) of mature mouse SLITRK3 contains 6 leucine rich repeats (LRR), a C-terminal LRR domain, and 6 more LRR flanked by a pair of N- and C-terminal LRR domains (2, 3). Within the ECD, mouse SLITRK3 shares 98% and 99.5% amino acid sequence identity with human and rat SLITRK3, respectively. SLITRK3 is expressed in multiple regions of the brain, particularly the cerebral cortex and hippocampus (4). SLITRK3 can suppress neurite outgrowth and promote the formation of inhibitory presynaptic structures (3-6). It localizes post-synaptically and binds to PTP-delta and PTP-sigma on pre-synaptic inhibitory terminals (4, 5). SLITRK3 is up-regulated during the development of gastrointestinal stromal tumors (7).

References:

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5. Takahashi, H. *et al.* (2012) Nat. Neurosci. **15**:389.
6. Loh, K. H. *et al.* (2016) Cell **166**:1295.
7. Wang, C.J. *et al.* (2015) World J. Gastroenterol. **21**:8398.

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