Recombinant Mouse SLITRK2

Catalog Number: 9965-SK

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived mouse SLITRK2 protein Arg22-Leu622, with a C-terminal 6-His tag Accession # Q810C0
N-terminal Sequence Analysis	Arg22
Predicted Molecular Mass	69 kDa

SPECIFICATIONS

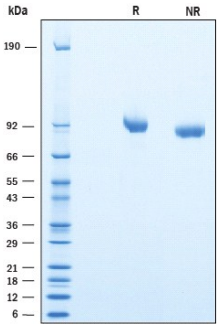
SDS-PAGE	86-98 kDa, reducing conditions
Activity	Measured by its ability to inhibit neurite outgrowth of dissociated E13 chick embryonic dorsal root ganglia (DRG) neurons. Able to significantly inhibit neurite outgrowth when immobilized as a 3 µL droplet containing 200-400 ng on a nitrocellulose-coated 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 250 µg/mL in water.
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	• 12 months from date of receipt, ≤ -20 °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 SLITRK2 was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® blue staining, showing bands at 86-98 kDa respectively.

BACKGROUND

SLITRK2 (Slit and Trk-like family member 2) is an approximately 110 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 SLITRK2 contains 6 leucine rich repeats (LRR) followed by a C-terminal LRR domain, followed by 6 more LRR flanked by a pair of N- and C-terminal LRR domains (2, 3). Within the ECD, mouse SLITRK2 shares 98% and 99% amino acid sequence identity with human and rat SLITRK2, respectively. SLITRK2 is expressed in multiple regions of the brain, particularly the cerebral cortex and hippocampus (4). It can suppress neurite outgrowth and promote the formation of excitatory and inhibitory presynaptic structures (3-5). The synaptogenic function is dependent on the interaction of SLITRK2 with select isoforms of PTP-sigma (5, 6). In humans, mutations of SLITRK2 are associated with bipolar disorder and schizophrenia (7, 8).

References:

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