



Recombinant Protein Technical Manual

Recombinant Human SLITRK1 Protein (His Tag)

RPES4551

Product Data:

Product SKU: RPES4551

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_443142.1

Protein Information:

Molecular Mass:

AP Molecular Mass: 10515 kDa

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: FLJ54428;KIAA0918;KIAA1910;LRRC12;RP11-395N17.1;SLITRK1;TTM

Immunogen Information:

Sequence: Met 1-Ser 616

Background:

SLITRK1 (Slit and Trk-like family member 1) is a integral membrane protein belonging to the SLITRK family consists of at least 6 members (SLITRK1-6). They are named and characterized by the presence of two leucine-rich repeats (LRRs) in the extracellular domain similar to those found in a secreted axonal growth-controlling protein, Slit, as well as a C-terminal domain with homology to Trk neurotrophin tyrosine kinase receptors. Expression of SLITRKs are highly restricted to neural tissues, and are identified as the neuronal components modulating the neurite outgrowth. More specifically, SLITRK1 expression is found in the mature neurons of the cerebrum, thalamus and hippocampus, and induces unipolar neurites in cultured neuronal cells. Human SLITRK1 is a 696 amino acid precursor protein, and one truncating frameshift mutation (448 aa) has been linked to Tourette's syndrome, a genetically influenced developmental neuropsychiatric disorder characterized by chronic vocal and motor tics. In addition, all SLITRK genes are differentially expressed in brain tumors, such as astrocytoma, oligodendroglioma, glioblastoma, and are suggested to be useful molecular indicators of brain tumor properties.