



LD Biopharma, Inc.
7384 Trade Street, Suite B
San Diego, CA 92121
Tel: 858-876-8266
<http://www.ldbiopharma.com>

- PRODUCT DATA SHEET -

Name of Product: Recombinant Human SLM2-11R Protein
Catalog Number: hTF-1913
Manufacturer: LD Biopharma, Inc.

Introduction

The KH-domain RNA-binding protein SLM2 gene encodes a RNA-binding protein that plays a role in the regulation of alternative splicing and influences mRNA splice site selection and exon inclusion. It binds preferentially to the 5'(AU)UAAA-3' motif in vitro. Its RNA-binding abilities are down-regulated by tyrosine kinase PTK6. It regulates many gene mRNA splicing such as VEGF, CD44, NRXN1-3, and also bind FABP9 mRNA. It may plays a role as a negative regulator of cell growth and inhibit cell proliferation. Recent data indicated that SLM2 is highly expressed in glutamatergic pyramidal cells of themouse hippocampus and in a specific subset of g-aminobutyric acid (GABA)-releasing interneuron and plays a essential role for functional specification of glutamategic synapses.

Full-length human SLM2 cDNA (345aa) was constructed with codon optimization using gene synthesis technology and expressed with a small T7-His-TEV cleavage site Tag (29aa) fusion at its N-terminal and 11 arginine (11R) tag at its C-terminal. It was expressed in E.coli as inclusion bodies. The final product was refolded using our unique "temperature shift inclusion body refolding" technology and chromatographically purified.

Gene Symbol: SLM2 (KHDRBS3, Etle; etoile; SALP; T-STAR)
Accession Number: NP_006549
Species: Human
Size: 20 µg / Vial
Composition: 0.2 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, Sucrose and DTT.
Storage: In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

Key References

Lisa Traunmuller. et al., *Control of neuronal synapse specification by a highly dedicated alternative splicing program*. Science. Vol 352. May 20. 982-986 (2016)



LD Biopharma, Inc.
7384 Trade Street, Suite B
San Diego, CA 92121
Tel: 858-876-8266
<http://www.ldbiopharma.com>

Feracci M, et al., *Structural basis of RNA recognition and dimerization by the STAR proteins T-STAR and Sam68*. Nat Commun 7, 10355 (2016)

Sernbo S, et al., *Nuclear T-STAR protein expression correlates with HER2 status, hormone receptor negativity and prolonged recurrence free survival in primary breast cancer and decreased cancer cell growth in vitro*. PLoS ONE 8 (7), E70596 (2013)

Applications

1. May be used for in vitro SLM2 mediated specific gene mRNA splicing regulation for various cells study by intracellular delivery of this protein directly in cell culture medium.
2. May be used for mapping SLM2 protein-protein interaction.
3. May be used as specific substrate protein for kinase, and ubiquitin (Sumo pathway) related enzyme functional screening assays.
4. As immunogen for specific antibody production.

Quality Control

Purity: > 90% by SDS-PAGE.

Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHHENLYFQGGEFEEKYLPELMAEKDSLDPSTHALRLVNQEIEKFQK
GEGKDEEKYIDVVINKNMKLGQKVLIPVKQFPKFNFGKLLGPRGNSLKRLQEETLTKMSILGK
GSMRDKAKEEELRKSGEAKYFHLNDDLHVLIIEVFAPPAEAYARMGHALEEIKKFLIPDYND EIR
QAQLQELTYLNGGSENADVPPVVRGKPTLRTRGVPAPAITRGRGGVTARPVGVVVPRGTPTPRGV
LSTRGPVSRGRGLLTPRARGVPPTGYRPPPPPTQETYGEYD YDDGYGTAYDEQSYDSYDNSYS
TPAQSGADYYDYGHGLSEETYDSYGQEEWTNSRHKAPSARTAKGVYRDQPYGRYESGGGGSPGR
RRRRRRRRRR