

Recombinant Protein Technical Manual Recombinant Human SRPK1 Protein (His & GST Tag)

RPES3055

Product Data:

Product SKU: RPES3055 **Size:** 20μg

Species: Human Expression host: Baculovirus-Insect Cells

Uniprot: AAH38292.1

Protein Information:

Molecular Mass: 102 kDa

AP Molecular Mass: 120 kDa

Tag: N-His & GST

Bio-activity:

Purity: > 80 % 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 20mM Tris, 500mM NaCl, 2mM GSH, 10% gly, pH 7.4

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

Application:

Synonyms: RP3-422H11.1;SFRSK1

Immunogen Information:

Sequence: Glu 2-Ser 655

Background:

Serine / threonine-protein kinase SRPK1, also known as SFRS protein kinase 1, Serine/arginine-rich protein-specific kinase 1, SR-protein-specific kinase 1 and SRPK1, is a cytoplasm and nucleus protein which belongs to the protein kinase superfamily and CMGC Ser/Thr protein kinase family. Isoform 2 of SRPK1 is predominantly expressed in the testis but is also present at lower levels in heart, ovary, small intestine, liver, kidney, pancreas and skeletal muscle. Isoform 1 of SRPK1 is only seen in the testis, at lower levels than isoform 2. SRPK1 hyperphosphorylates RS domain-containing proteins such as SFRS1, SFRS2 and ZRSR2 on serine residues during metaphase but at lower levels during interphase. SRPK1 plays a central role in the regulatory network for splicing, controlling the intranuclear distribution of splicing factors in interphase cells and the reorganization of nuclear speckles during mitosis. SRPK1 locks onto SFRS1 to form a stable complex and processively phosphorylates the RS domain. SRPK1 appears to mediate HBV core protein phosphorylation which is a prerequisite for pregenomic RNA encapsidation into viral capsids.