Recombinant Protein Technical Manual

Recombinant Human SELM/Selenoprotein M Protein (His Tag)

RPES4794

Product Data:

Product SKU: RPES4794

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: Q8WWX9

Protein Information:

Molecular Mass: 15.4 kDa

AP Molecular Mass: 19 kDa

Tag: C-His

Bio-activity:

Purity: > 97 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

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

Formulation: Lyophilized from sterile 50mM Tris, 50mM NaCl, 50mM Arg, 0.3% Tween 20, 5% glycerol, pH 8.5

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

Application:

Synonyms: SEPM

Immunogen Information:

Sequence: Ala 24-Leu 145

Background:

Selenoprotein M is a selenoprotein, which contains a selenocysteine (Sec) residue at its active site. The selenocysteine M is encoded by the UGA codon that normally signals translation termination. The 3' UTR of selenoprotein genes have a common stem-loop structure, the sec insertion sequence (SECIS), that is necessary for the recognition of UGA as a Sec codon rather than as a stop signal. This gene is expressed in a variety of tissues, and the protein is localized to the perinuclear structures. Selenoprotein M May function as a thiol-disulfide oxidoreductase that participates in disulfide bond formation. This protein is widely expressed and is highly expressed in brain. It is found in Cytoplasm, perinuclear region, Endoplasmic reticulum, Golgi apparatus. Localized to perinuclear structures corresponding to Golgi and endoplasmic reticulum. Experiments results have suggested that selenoprotein M may have an important role in protecting against oxidative damage in the brain and may potentially function in calcium regulation.