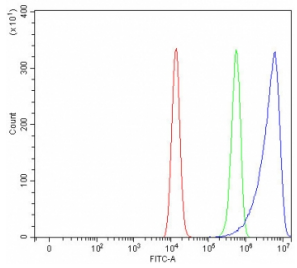
SEPN1 Antibody / Selenoprotein N / SELENON / SELN (RQ8226)

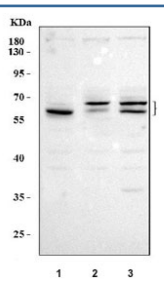
Catalog No.	Formulation	Size
RQ8226	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q9NZV5
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This SEPN1 antibody is available for research use only.



Flow cytometry testing of fixed and permeabilized human HEL cells with SEPN1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= SEPN1 antibody.



Western blot testing of human 1) A549, 2) HepG2 and 3) HeLa cell lysate with SEPN1 antibody. Predicted molecular weight ~62 kDa and ~69 kDa (two isoforms).

Description

This gene encodes a glycoprotein that is localized in the endoplasmic reticulum. It plays an important role in cell protection against oxidative stress, and in the regulation of redox-related calcium homeostasis. Mutations in this gene are associated with early onset muscle disorders, referred to as SEPN1-related myopathy. SEPN1-related myopathy consists of 4 autosomal recessive disorders, originally thought to be separate entities: rigid spine muscular dystrophy (RSMD1), the classical form of multiminicore disease, desmin related myopathy with Mallory-body like inclusions, and congenital fiber-type disproportion (CFTD). This protein is a selenoprotein, containing the rare amino acid selenocysteine (Sec). Sec is encoded by the UGA codon, which normally signals translation termination. The 3' UTRs of selenoprotein mRNAs contain a conserved stem-loop structure, designated the Sec insertion sequence (SECIS) element, that is necessary for the recognition of UGA as a Sec codon, rather than as a stop signal. A second stop-codon redefinition element (SRE) adjacent to the UGA codon has been identified in this gene (PMID:15791204). SRE is a phylogenetically conserved stem-loop structure that stimulates readthrough at the UGA codon, and augments the Sec insertion efficiency by SECIS. Alternatively spliced transcript variants have been found for this gene.

Application Notes

Optimal dilution of the SEPN1 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids H260-P590) was used as the immunogen for the SEPN1 antibody.

Storage

After reconstitution, the SEPN1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.