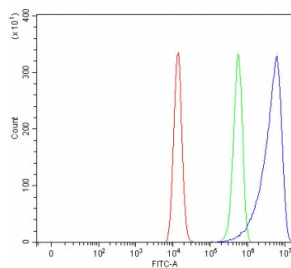


## SEPN1 Antibody / Selenoprotein N / SELENON / SELN (RQ8226)

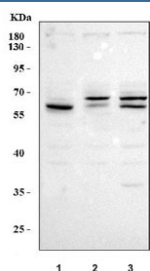
Catalog No.	Formulation	Size
RQ8226	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Antigen affinity purified
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity purified
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	Q9NZV5
<b>Applications</b>	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
<b>Limitations</b>	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.