ARG44075
anti-SELENON antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal recognizes SELENON
Tested Reactivity	Hu
Tested Application	FACS, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SELENON
Species	Human
Immunogen	Human SELENON recombinant protein (Position: H260-P590).
Conjugation	Un-conjugated
Alternate Names	SELENON; Selenoprotein N; SELN; SEPN1; RSS; Selenoprotein N, 1; MDRS1; RSMD1; Rigid Spine Muscular Dystrophy 1; CMYP3; CFTD; SelN

Application Instructions

Application table

Application	Dilution
FACS	1 - 3 µg/10^6 cells
WB	0.25 - 0.5 µg/ml

Application Note: The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

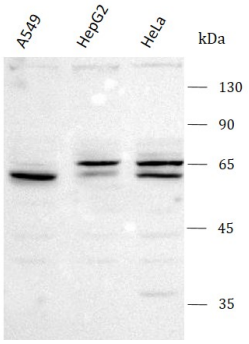
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

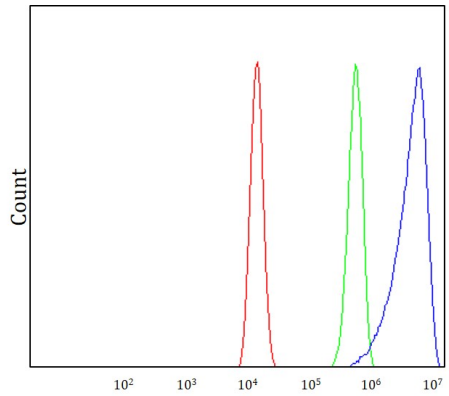
Gene Symbol	SELENON
Gene Full Name	Selenoprotein N
Background	This gene encodes a glycoprotein that is localized in the endoplasmic reticulum. It plays an important role in cell protection against oxidative stress, and in the regulation of redox-related calcium homeostasis. Mutations in this gene are 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.
Function	Plays an important role in cell protection against oxidative stress and in the regulation of redox-related calcium homeostasis. Regulates the calcium level of the ER by protecting the calcium pump ATP2A2 against the oxidoreductase ERO1A-mediated oxidative damage. Within the ER, ERO1A activity increases the concentration of H2O2, which attacks the luminal thiols in ATP2A2 and thus leads to cysteinyl sulfenic acid formation (-SOH) and SEPN1 reduces the SOH back to free thiol (-SH), thus restoring ATP2A2 activity.
Calculated Mw	66 kDa
PTM	Glycoprotein
Cellular Localization	Endoplasmic reticulum, Membrane

Images



ARG44075 anti-SELENON antibody WB image

Western blot: A549, HepG2 and Hela stained with ARG44075 anti-SELENON antibody at 0.5 µg/mL dilution.



ARG44075 anti-SELENON antibody FACS image

Flow Cytometry: HEL stained with ARG44075 anti-SELENON antibody at 1 µg/10^6 cells dilution.