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SEPN1/Selenoprotein N Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57859

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q9NZV5
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	65813

Additional Information

Gene ID	57190
Other Names	Selenoprotein N, SelN, SELENON {ECO:0000303|PubMed:27645994, ECO:0000312|HGNC:HGNC:15999}
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SELENON {ECO:0000303|PubMed:27645994, ECO:0000312|HGNC:HGNC:15999}
Function	[Isoform 2]: 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 H(2)O(2), 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 (PubMed:25452428). Acts as a modulator of ryanodine receptor (RyR) activity: protects RyR from oxidation due to increased oxidative stress, or directly controls the RyR redox state, regulating the RyR-mediated calcium mobilization required for normal muscle development and differentiation (PubMed:18713863, PubMed:19557870).
Cellular Location	[Isoform 2]: Endoplasmic reticulum membrane
Tissue Location	Isoform 1 and isoform 2 are expressed in skeletal muscle, brain, lung and

placenta. Isoform 2 is also expressed in heart, diaphragm and stomach.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.