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SELK Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13595c

Product Information

Application	WB, E
Primary Accession	Q9Y6D0
Other Accession	Q4R8M1, NP_067060.2
Reactivity	Human, Rat, Mouse
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32894
Calculated MW	10645
Antigen Region	32-61

Additional Information

Gene ID	58515
Other Names	Selenoprotein K, SelK, SELK
Target/Specificity	This SELK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 32-61 amino acids from the Central region of human SELK.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SELK Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SELENOK {ECO:0000303|PubMed:27645994, ECO:0000312|HGNC:HGNC:30394}
Function	Required for Ca(2+) flux in immune cells and plays a role in T-cell proliferation and in T-cell and neutrophil migration (By similarity). Involved in

	endoplasmic reticulum-associated degradation (ERAD) of soluble glycosylated proteins (PubMed:22016385). Required for palmitoylation and cell surface expression of CD36 and involved in macrophage uptake of low-density lipoprotein and in foam cell formation (By similarity). Together with ZDHHC6, required for palmitoylation of ITPR1 in immune cells, leading to regulate ITPR1 stability and function (PubMed:25368151). Plays a role in protection of cells from ER stress- induced apoptosis (PubMed:20692228). Protects cells from oxidative stress when overexpressed in cardiomyocytes (PubMed:16962588).
Cellular Location	Endoplasmic reticulum membrane; Single-pass membrane protein. Cell membrane; Single-pass membrane protein. Note=Probably mainly localized in the ER
Tissue Location	Highly expressed in heart.

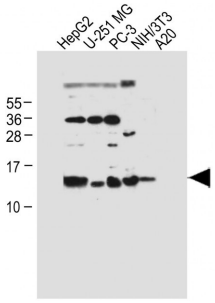
Background

This gene encodes a selenoprotein, which contains a selenocysteine (Sec) residue at its active site. The selenocysteine 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 selenoprotein is localized to the endoplasmic reticulum and is highly expressed in the heart, where it may function as an antioxidant.

References

Lu, C., et al. FEBS Lett. 580(22):5189-5197(2006)
Kryukov, G.V., et al. Science 300(5624):1439-1443(2003)

Images



All lanes : Anti-SELK Antibody (Center) at 1:500 dilution Lane 1: HepG2 whole cell lysate Lane 2: U-251 MG whole cell lysate Lane 3: PC-3 whole cell lysate Lane 4: NIH/3T3 whole cell lysate Lane 5: A20 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 11 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

- Stable expression and function of the inositol 1,4,5-triphosphate receptor requires palmitoylation by a DHHC6/selenoprotein K complex.