10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# SELK Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13595c

## Product Information

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| **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

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| **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

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| **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 |

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| | 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. |

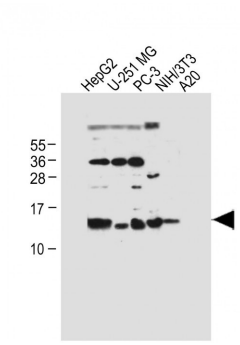
## Background

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.