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PEF1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP17342c

Specification

PEF1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q9UBV8
Other Accession	NP_036524.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**30381**
Antigen Region	**95-121**

PEF1 Antibody (Center) - Additional Information

Gene ID 553115

Other Names
Peflin, PEF protein with a long N-terminal hydrophobic domain, Penta-EF hand domain-containing protein 1, PEF1, ABP32

Target/Specificity
This PEF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 95-121 amino acids from the Central region of human PEF1.

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
PEF1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PEF1 Antibody (Center) - Protein Information

Name PEF1 (HGNC:30009)

Synonyms ABP32

Function Calcium-binding protein that acts as an adapter that bridges unrelated proteins or stabilizes weak protein-protein complexes in response to calcium. Together with PDCD6, acts as a calcium-dependent adapter for the BCR(KLHL12) complex, a complex involved in endoplasmic reticulum (ER)-Golgi transport by regulating the size of COPII coats (PubMed:27716508). In response to cytosolic calcium increase, the heterodimer formed with PDCD6 interacts with, and bridges together the BCR(KLHL12) complex and SEC31 (SEC31A or SEC31B), promoting monoubiquitination of SEC31 and subsequent collagen export, which is required for neural crest specification (PubMed:27716508). Its role in the heterodimer formed with PDCD6 is however unclear: some evidence shows that PEF1 and PDCD6 work together and promote association between PDCD6 and SEC31 in presence of calcium (PubMed:27716508). Other reports show that PEF1 dissociates from PDCD6 in presence of calcium, and may act as a negative regulator of PDCD6 (PubMed:11278427). Also acts as a negative regulator of ER-Golgi transport; possibly by inhibiting interaction between PDCD6 and SEC31 (By similarity).

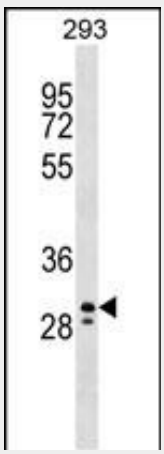
Cellular Location
Cytoplasm. Endoplasmic reticulum {ECO:0000250|UniProtKB:Q641Z8}. Membrane; Peripheral membrane protein. Cytoplasmic vesicle, COPII-coated vesicle membrane; Peripheral membrane protein. Note=Membrane-associated in the presence of Ca(2+) (PubMed:11278427). Localizes to endoplasmic reticulum exit site (ERES) (By similarity). {ECO:0000250|UniProtKB:Q641Z8, ECO:0000269|PubMed:11278427}

PEF1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PEF1 Antibody (Center) - Images



PEF1 Antibody (Center) (Cat. #AP17342c) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the PEF1 antibody detected the PEF1 protein (arrow).

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PEF1 Antibody (Center) - Background

This gene encodes a calcium-binding protein belonging to the penta-EF-hand protein family. The encoded protein has been shown to form a heterodimer with the programmed cell death 6 gene product and may modulate its function in Ca(2+) signaling. Alternative splicing results in multiple transcript variants and a pseudogene has been identified on chromosome 1.

PEF1 Antibody (Center) - References

Lamesch, P., et al. Genomics 89(3):307-315(2007)
Hansen, C., et al. FEBS Lett. 545 (2-3), 151-154 (2003) :
Satoh, H., et al. Biochim. Biophys. Acta 1600 (1-2), 61-67 (2002) :
Kitaura, Y., et al. Arch. Biochem. Biophys. 399(1):12-18(2002)
Kitaura, Y., et al. J. Biol. Chem. 276(17):14053-14058(2001)