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PEF1 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP17342c

Specification

PEF1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q9UBV8

PEF1 Antibody (Center) Blocking Peptide - 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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PEF1 Antibody (Center) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/11278427"

target="_blank">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) Blocking Peptide - Protocols

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

- Blocking Peptides

PEF1 Antibody (Center) Blocking Peptide - Images

PEF1 Antibody (Center) Blocking Peptide - Background

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

PEF1 Antibody (Center) Blocking Peptide - 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)