

PEF1 Antibody

Rabbit mAb Catalog # AP92916

Specification

PEF1 Antibody - Product Information

Application Primary Accession Reactivity Clonality Other Names ABP32; PEF; pef1; PEF1A; Peflin;	WB <u>O9UBV8</u> Rat Monoclonal
lsotype Host Calculated MW	Rabbit IgG Rabbit 30381 Da
PEF1 Antibody - Additional Information	
Purification Immunogen	Affinity-chromatography A synthesized peptide derived from human
Description	PEF1 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 calcium-dependent adapter for the BCR(KLHL12) complex, a complex involved in endoplasmic reticulum (ER)-Golgi transport by regulating the size
Storage Condition and Buffer	of COPII coats (PubMed:27716508). Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

PEF1 Antibody - 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:http://www.uniprot.org/citations/27716508

target="_blank">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

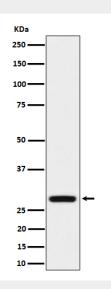
Cytoplasm. Endoplasmic reticulum {ECO:0000250|UniProtKB:Q641Z8}. Membrane; Peripheral membrane protein. Cytoplasmic vesicle, COPII-coated vesicle membrane; Peripheral membrane protein. Note=Membrane-associated in the presence of Ca(2+) (PubMed:11278427). Localizes to endoplasmic reticulum exit site (ERES)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

PEF1 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PEF1 Antibody - Images



Western blot analysis of PEF1 expression in HeLa cell lysate.