

# PEF1 Rabbit mAb

Catalog # AP75889

## Specification

# PEF1 Rabbit mAb - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IP <u>O9UBV8</u> Human, Mouse, Rat Rabbit Monoclonal Antibody 30381

## **PEF1** Rabbit mAb - Additional Information

Gene ID 553115

Other Names PEF1

**Dilution** WB~~1/500-1/1000 IP~~N/A

Format 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## PEF1 Rabbit mAb - Protein Information

Name PEF1 (<u>HGNC:30009</u>)

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:<a href="http://www.uniprot.org/citations/27716508" target="\_blank">27716508</a>). 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:<a href="http://www.uniprot.org/citations/27716508" target="\_blank">27716508" target="\_blank">27716508" target="\_blank">27716508" target="\_blank">27716508</a>). Its role in 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:<a href="http://www.uniprot.org/citations/27716508" target="\_blank">27716508</a>/a>). 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:<a



href="http://www.uniprot.org/citations/27716508" target="\_blank">27716508</a>). 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</a>). 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 Rabbit mAb - Protocols

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

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

#### PEF1 Rabbit mAb - Images

