

PEF1 Rabbit mAb

Catalog # AP75889

Product Information

Application WB, IP **Primary Accession** Q9UBV8

Reactivity Human, Mouse, Rat

Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 30381

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.

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 endonlasmic reticulum

BCR(KLHL12) complex, a complex involved in endoplasmic reticulum (ER)-Golgi transport by regulating the size of COPII coats (PubMed:<u>27716508</u>).

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

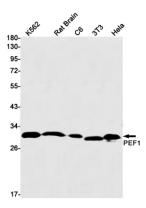
(PubMed: 11278427). Also acts as a negative regulator of ER-Golgi transport; possibly by inhibiting interaction between PDCD6 and SEC31 (By similarity).

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}

Images



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