

PEF1 Rabbit mAb

Catalog # AP75889

Product Information

Application WB. IP O9UBV8 **Primary Accession**

Human, Mouse, Rat Reactivity

Host

Clonality Monoclonal Antibody

Calculated MW 30381

Additional Information

Gene ID 553115

Other Names PEF1

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

Format Liquid

Protein Information

PEF1 (HGNC:30009) Name

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: <u>27716508</u>). 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).

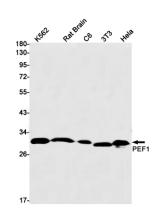
Cytoplasm. Endoplasmic reticulum {ECO:0000250 | UniProtKB:Q641Z8}. **Cellular Location**

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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