

ARG42967 anti-PEF1 / Peflin antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PEF1 / Peflin
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PEF1 / Peflin
Species	Human
Immunogen	Recombinant protein corresponding to R170-L284 of Human PEF1 / Peflin.
Conjugation	Un-conjugated
Alternate Names	ABP32; PEF1A; Peflin; PEF protein with a long N-terminal hydrophobic domain; Penta-EF hand domain-containing protein 1

Application Instructions

Application table	Application	Dilution
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 30 kDa	

Properties

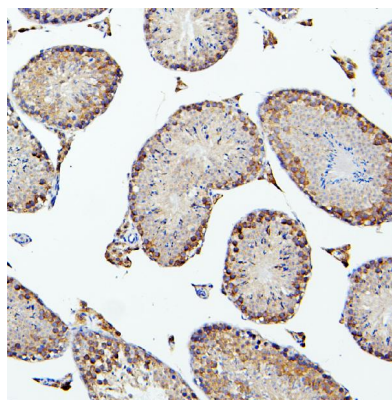
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na ₂ HPO ₄ , 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

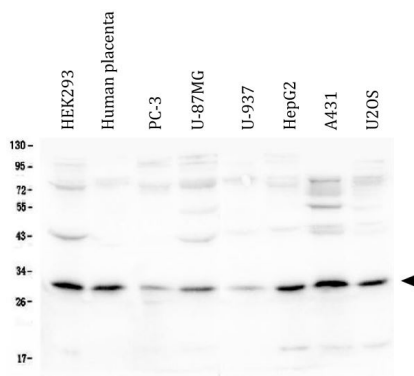
Gene Symbol	PEF1
Gene Full Name	penta-EF-hand domain containing 1
Background	This gene encodes a calcium-binding protein belonging to the penta-EF-hand protein family. The encoded protein has been shown to form a heterodimer with the programmed cell death 6 gene product and may modulate its function in Ca(2+) signaling. Alternative splicing results in multiple transcript variants and a pseudogene has been identified on chromosome 1. [provided by RefSeq, May 2010]
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 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:11278427). Also acts as a negative regulator of ER-Golgi transport; possibly by inhibiting interaction between PDCD6 and SEC31 (By similarity). [UniProt]
Calculated Mw	30 kDa
PTM	Ubiquitinated by the BCR(KLHL12) E3 ubiquitin ligase complex. [UniProt]
Cellular Localization	Cytoplasm. Endoplasmic reticulum. 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). [UniProt]

Images



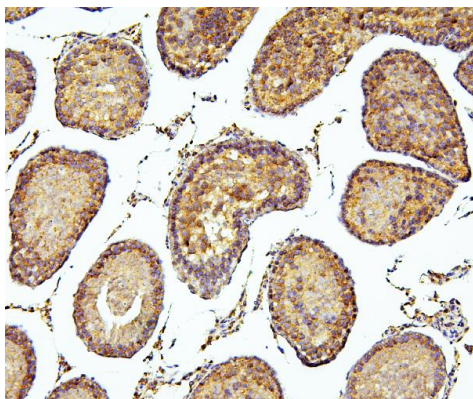
ARG42967 anti-PEF1 / Peflin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse testis tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42967 anti-PEF1 / Peflin antibody at 1 µg/ml dilution, overnight at 4°C.



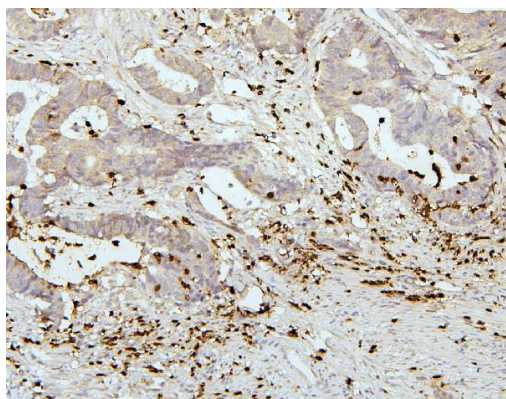
ARG42967 anti-PEF1 / Peflin antibody WB image

Western blot: 50 µg of sample under reducing conditions. HEK293, Human placenta, PC-3, U-87MG, U-937, HepG2, A431 and U2OS whole cell lysates stained with ARG42967 anti-PEF1 / Peflin antibody at 0.5 µg/ml dilution, overnight at 4°C.



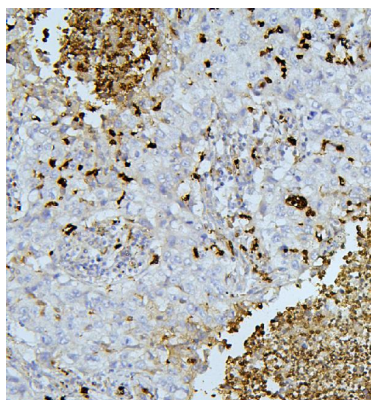
ARG42967 anti-PEF1 / Peflin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat testis tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42967 anti-PEF1 / Peflin antibody at 1 µg/ml dilution, overnight at 4°C.



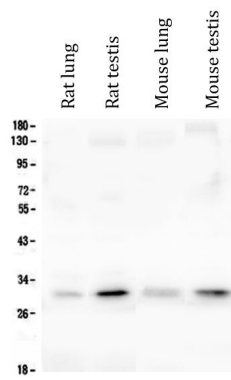
ARG42967 anti-PEF1 / Peflin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colon cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42967 anti-PEF1 / Peflin antibody at 1 µg/ml dilution, overnight at 4°C.



ARG42967 anti-PEF1 / Peflin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42967 anti-PEF1 / Peflin antibody at 1 µg/ml dilution, overnight at 4°C.



ARG42967 anti-PEF1 / Peflin antibody WB image

Western blot: 50 µg of sample under reducing conditions. Rat lung, Rat testis, Mouse lung and Mouse testis lysates stained with ARG42967 anti-PEF1 / Peflin antibody at 0.5 µg/ml dilution, overnight at 4°C.