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PTRF Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7421a

Product Information

Application	IHC-P, WB, E
Primary Accession	Q6NZI2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15455
Calculated MW	43476
Antigen Region	1-30

Additional Information

Gene ID	284119
Other Names	Polymerase I and transcript release factor, Cavin-1, PTRF {ECO:0000312|EMBL:AAH661231}
Target/Specificity	This PTRF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human PTRF.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PTRF Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CAVIN1 (HGNC:9688)
Synonyms	PTRF
Function	Plays an important role in caveolae formation and organization. Essential for the formation of caveolae in all tissues (PubMed:18056712,

PubMed:18191225, PubMed:19726876). Core component of the CAVIN complex which is essential for recruitment of the complex to the caveolae in presence of calveolin-1 (CAV1). Essential for normal oligomerization of CAV1. Promotes ribosomal transcriptional activity in response to metabolic challenges in the adipocytes and plays an important role in the formation of the ribosomal transcriptional loop. Dissociates transcription complexes paused by DNA-bound TTF1, thereby releasing both RNA polymerase I and pre-RNA from the template (By similarity) (PubMed:18056712, PubMed:18191225, PubMed:19726876). The caveolae biogenesis pathway is required for the secretion of proteins such as GASK1A (By similarity).

Cellular Location

Membrane, caveola. Cell membrane. Microsome. Endoplasmic reticulum {ECO:0000250|UniProtKB:P85125}. Cytoplasm, cytosol. Mitochondrion. Nucleus Note=Translocates to the cytoplasm from the caveolae upon insulin stimulation (PubMed:17026959). Colocalizes with CAV1 in lipid rafts in adipocytes. Localizes in the caveolae in a caveolin-dependent manner (By similarity). {ECO:0000250|UniProtKB:O54724, ECO:0000269|PubMed:17026959}

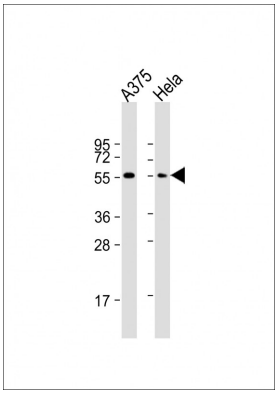
Background

Termination of transcription by RNA polymerase I involves pausing of transcription by TTF1, and the dissociation of the transcription complex, releasing pre-rRNA and RNA polymerase I from the template. PTRF is required for dissociation of the ternary transcription complex.

References

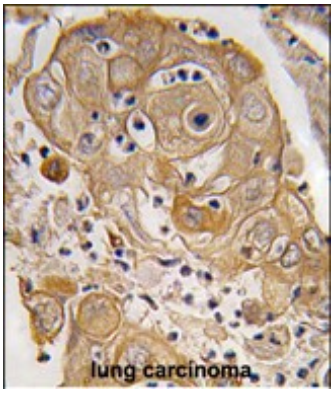
Aboulaich,N., Biochem. Biophys. Res. Commun. 350 (3), 657-661 (2006)
Aboulaich,N., Biochem. J. 383 (PT 2), 237-248 (2004)
Hasegawa,T., Biochem. J. 347 PT 1, 55-59 (2000)

Images



All lanes : Anti-PTRF Antibody (N-term) at 1:1000 dilution Lane 1: A375 whole cell lysate Lane 2: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 43 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with PTRF antibody (N-term) (Cat.#AP7421a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Citations

- Reciprocal modulation of surface expression of annexin A2 in a human umbilical vein endothelial cell-derived cell line by eicosapentaenoic acid and docosahexaenoic acid.

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