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# PTRF Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7421a

## Product Information

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|---|---|
| **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

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| **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

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| **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}

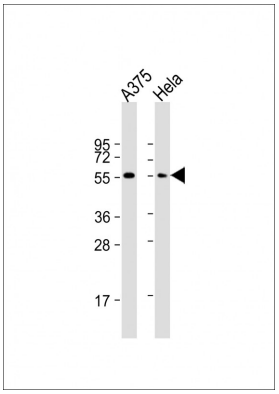
## Background

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

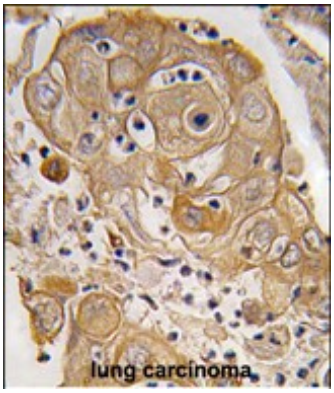
Aboulaich,N., Biochem. Biophys. Res. Commun. 350 (3), 657-661 (2006)
Aboulaich,N., Biochem. J. 383 (PT 2), 237-248 (2004)
Hasegawa,T., Biochem. J. 347 PT 1, 55-59 (2000)

## 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.