

PTRF Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP50762

Product Information

Application	WB
Primary Accession	Q6NZI2
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Calculated MW	43476

Additional Information

Gene ID	284119
Other Names	Polymerase I and transcript release factor, Cavin-1, PTRF {ECO:0000312 EMBL:AAH661231}
Dilution	WB~~ 1:1000
Format	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20°C

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}

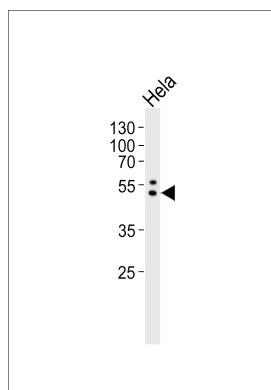
Background

Plays an important role in caveolae formation and organization. Required for the sequestration of mobile caveolin into immobile caveolae. 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

Wang Y.-G.,et al.Submitted (OCT-2000) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Jansa P.,et al.EMBO J. 17:2855-2864(1998).
Aboulaich N.,et al.Biochem. J. 383:237-248(2004).

Images



Western blot analysis of lysate from HeLa cell line,using PTRF Antibody(AP50762). AP50762 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysate at 35ug.

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