

PCIF1/CAPAM antibody (pAb)

Catalog Nos: 65711, 65911, 65712

RRID: AB_3216315

Application(s): IP, WB

Reactivity: Human

Quantities: 100 µg, 50 µg, 10 µg

Purification: Protein A Chromatography

Host: Rabbit

Isotype: IgG

Molecular Weight: 80 kDa

Background: The abundant modification N6-methyladenosine (m6A), in eukaryotic mRNAs, has been identified as a major epitranscriptome mark that plays critical roles in RNA metabolism and function. In addition to the internal m6A, N6, 2-O dimethyladenosine (m6Am) is present at the transcription start site of capped mRNAs in vertebrates. The abundance of this modification in the transcriptome has been quantified and identified as the writer protein, cap-specific adenosine methyltransferase (CAPAM/PCIF1), is needed for this modification.

CAPAM/PCIF1 is identified as the Methyltransferase responsible for methylating 2-O-methyladenosine (Am) at its N6 position to generate m6Am. m6Am is involved in regulating translation of capped mRNAs. Depleting CAPAM/PCIF1 does not affect mRNA translation but is associated with reduced stability of a subset of m6Am annotated mRNAs.

Immunogen: This antibody was raised against a peptide within the C-terminal region of human PCIF1.

Buffer: Purified IgG in PBS, 30% glycerol, and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:

Applications Validated by Active Motif:

IP: 10 µl per IP

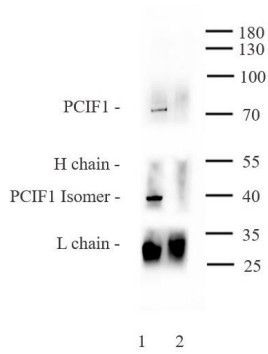
WB*: 0.5-2 µg/mL

*Note: Many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot.

For optimal IP results, the addition of 0.05% Tween 20 to all blocking solutions may also reduce background. Individual optimization may be required.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



PCIF1/CAPAM antibody (pAb) tested by Immunoprecipitation.

10 µg of PCIF1/CAPAM antibody was used to immunoprecipitate PCIF1/CAPAM from 500 µg of HeLa whole cell extract (lane 1). 10 µg of rabbit IgG was used as a negative control (lane 2). The immunoprecipitated protein was detected by Western blotting using the PCIF1/CAPAM antibody at 1 µg/mL.



PCIF1/CAPAM antibody (pAb) tested by Western blot.

MCF7 nuclear extract (20 µg per lane) was probed with PCIF1/CAPAM antibody (0.5 µg/mL).