

YTHDF2 antibody (pAb)

Catalog Nos: 65738, 65938, 65739**RRID:** AB_3216375**Application(s):** WB**Reactivity:** Human**Quantities:** 100 µg, 50 µg, 10 µg**Purification:** Affinity Purified**Host:** Rabbit**Isotype:** IgG**Molecular Weight:** 70 kDa

Background: YTHDF2 (YT521-B homology domain family 2, also known as CAHL, HGRG8, NY-REN-2) is a member of the YTH (YT521-B homology) superfamily containing YTH domain. Human YTH domain family proteins include three members, YTHDF1-3, which mainly localized in the cytoplasm. YTHDF proteins contain a highly conserved single-stranded RNA-binding domain which can specifically recognize and bind m6A-containing RNAs. An important role of **YTHDF2** is in regulating mRNA stability. **YTHDF2** recognizes many m6A-containing mRNAs that are not being actively translated and recruits them to cytoplasmic processing (P) bodies for degradation. **YTHDF2** preserves 5' UTR methylation of stress-induced transcripts and promotes cap-independent mRNA translation by competitive binding and limiting the m6A 'eraser' FTO from demethylation.

N6-methylated adenine (m6A) is prevalently present in nearly all RNA types and can be found in all organisms from bacteria to humans. It preferentially appears around stop codons and within long internal exons in mammalian messenger RNAs. m6A plays an important role in the efficiency of mRNA splicing, processing, translation efficiency, editing and mRNA stability. m6A also takes place in other RNA molecules, such as primary miRNA (pri-miRNAs).

Immunogen: This YTHDF2 antibody was raised against a fusion protein with His-tags at the C-terminus.

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

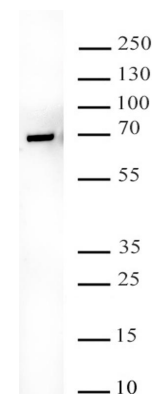
Application Notes:

Applications Validated by Active Motif:

WB: 1 - 4 µg/mL

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.

**YTHDF2 antibody (pAb) tested by Western blot.**

HeLa nuclear extract (20 µg) was probed with YTHDF2 antibody at 1 mg/mL.