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KD-Validated Anti-YTHDC2 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2288

Specification

KD-Validated Anti-YTHDC2 Rabbit Monoclonal Antibody - Product Information

Application	**WB**
Primary Accession	Q9H6S0
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 161 kDa; observed, 160 kDa KDa**
Gene Name	**Ythdc2**
Aliases	**YTHDC2; YTH N6-Methyladenosine RNA Binding Protein C2; 3'-5' RNA Helicase YTHDC2; YTH Domain Containing 2; DKFZp564A186; FLJ10053; FLJ2194; HYTHDC2; Probable ATP-Dependent RNA Helicase YTHDC2; CsA-Associated Helicase-Like Protein; YTH Domain-Containing Protein 2; EC 3.6.4.13; EC 3.6.1; CAHL**
Immunogen	**Recombinant protein of mouse YTHDC2**

KD-Validated Anti-YTHDC2 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**64848**

Other Names
3'-5' RNA helicase YTHDC2, 3.6.4.13, YTH domain-containing protein 2, hYTHDC2, YTHDC2 {ECO:0000303|PubMed:29033321, ECO:0000312|HGNC:HGNC:24721}

KD-Validated Anti-YTHDC2 Rabbit Monoclonal Antibody - Protein Information

Name YTHDC2 {ECO:0000303|PubMed:29033321, ECO:0000312|HGNC:HGNC:24721}

Function
3'-5' RNA helicase that plays a key role in the male and female germline by promoting transition from mitotic to meiotic divisions in stem cells (PubMed:26318451, PubMed:29033321, PubMed:29970596). Specifically recognizes and binds N6-methyladenosine (m6A)-containing RNAs, a modification present at internal sites of mRNAs and some non-coding RNAs that plays a role in the efficiency of RNA processing and stability (PubMed:26318451, PubMed:29033321). Essential for ensuring a successful progression of the meiotic program in the germline by regulating the level of m6A-containing RNAs (By similarity). Acts by

binding and promoting degradation of m6A- containing mRNAs: the 3'-5' RNA helicase activity is required for this process and RNA degradation may be mediated by XRN1 exoribonuclease (PubMed:29033321). Required for both spermatogenesis and oogenesis (By similarity).

Cellular Location
Cytoplasm {ECO:0000250|UniProtKB:B2RR83}. Cytoplasm, perinuclear region

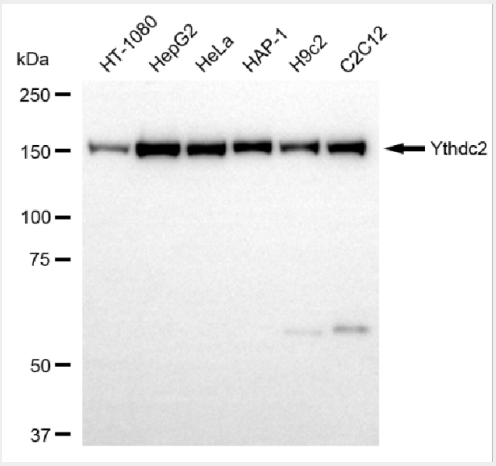
Tissue Location
Expressed in testis (PubMed:29087293). Not detected in spermatogonia next to the tubule wall but is strongly expressed in spermatocytes, suggesting that it is up-regulated in germ cells upon entry into meiosis (PubMed:29087293).

KD-Validated Anti-YTHDC2 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-YTHDC2 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Ythdc2 antibody (Cat#AGI2288). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Ythdc2 antibody (Cat#AGI2288, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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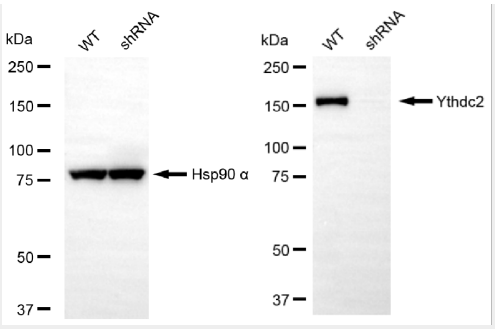

Western blotting analysis using anti-Ythdc2 antibody (Cat#AGI2288). Ythdc2 expression in wild-type (WT) and YTHDC2 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Ythdc2 antibody (Cat#AGI2288, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.