

#### TARBP2 / TRBP2 Antibody (clone 2G10)

Mouse Monoclonal Antibody Catalog # ALS14516

### **Specification**

## TARBP2 / TRBP2 Antibody (clone 2G10) - Product Information

Application WB, IHC
Primary Accession Q15633
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 39kDa KDa

### TARBP2 / TRBP2 Antibody (clone 2G10) - Additional Information

#### **Gene ID** 6895

#### **Other Names**

RISC-loading complex subunit TARBP2 {ECO:0000255|HAMAP-Rule:MF\_03034}, TAR RNA-binding protein 2, Trans-activation-responsive RNA-binding protein, TARBP2 {ECO:0000255|HAMAP-Rule:MF\_03034}, TRBP

# **Target/Specificity**

**Human TARBP2** 

## **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

### **Precautions**

TARBP2 / TRBP2 Antibody (clone 2G10) is for research use only and not for use in diagnostic or therapeutic procedures.

#### TARBP2 / TRBP2 Antibody (clone 2G10) - Protein Information

Name TARBP2 {ECO:0000255|HAMAP-Rule:MF 03034}

### Synonyms TRBP

#### **Function**

Required for formation of the RNA induced silencing complex (RISC). Component of the RISC loading complex (RLC), also known as the micro-RNA (miRNA) loading complex (miRLC), which is composed of DICER1, AGO2 and TARBP2. Within the RLC/miRLC, DICER1 and TARBP2 are required to process precursor miRNAs (pre-miRNAs) to mature miRNAs and then load them onto AGO2. AGO2 bound to the mature miRNA constitutes the minimal RISC and may subsequently dissociate from DICER1 and TARBP2. May also play a role in the production of short interfering RNAs (siRNAs) from double-stranded RNA (dsRNA) by DICER1 (By similarity) (PubMed:<a

href="http://www.uniprot.org/citations/15973356" target="\_blank">15973356</a>, PubMed:<a href="http://www.uniprot.org/citations/16142218" target="\_blank">16142218</a>, PubMed:<a



href="http://www.uniprot.org/citations/16271387" target="\_blank">16271387</a>, PubMed:<a href="http://www.uniprot.org/citations/16357216" target="\_blank">16357216</a>, PubMed:<a href="http://www.uniprot.org/citations/16424907" target="\_blank">16424907</a>, PubMed:<a href="http://www.uniprot.org/citations/17452327" target="\_blank">17452327</a>, PubMed:<a href="http://www.uniprot.org/citations/17452327" target="\_blank">18178619</a>, PubMed:<a href="http://www.uniprot.org/citations/18178619" target="\_blank">18178619</a>). Binds in vitro to the PRM1 3'-UTR (By similarity). Seems to act as a repressor of translation (By similarity). For some pre-miRNA substrates, may also alter the choice of cleavage site by DICER1 (PubMed:<a href="http://www.uniprot.org/citations/23063653" target="blank">23063653</a>). Negatively

(PubMed:<a href="http://www.uniprot.org/citations/30927622" target=" blank">30927622</a>).

**Cellular Location** 

Cytoplasm. Cytoplasm, perinuclear region. Nucleus

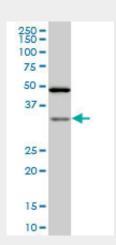
## TARBP2 / TRBP2 Antibody (clone 2G10) - Protocols

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

regulates IRF7-mediated IFN-beta signaling triggered by viral infection by inhibiting the phosphorylation of IRF7 and promoting its 'Lys'-48- linked ubiquitination and degradation

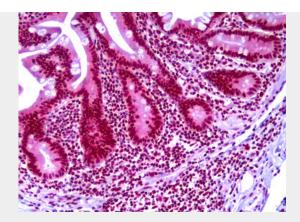
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## TARBP2 / TRBP2 Antibody (clone 2G10) - Images



TARBP2 monoclonal antibody, clone 2G10. Western blot of TARBP2 expression in HeLa nuclear extract.





Anti-TARBP2 antibody IHC of human small intestine.

# TARBP2 / TRBP2 Antibody (clone 2G10) - Background

Required for formation of the RNA induced silencing complex (RISC). Component of the RISC loading complex (RLC), also known as the micro-RNA (miRNA) loading complex (miRLC), which is composed of DICER1, AGO2 and TARBP2. Within the RLC/miRLC, DICER1 and TARBP2 are required to process precursor miRNAs (pre-miRNAs) to mature miRNAs and then load them onto AGO2. AGO2 bound to the mature miRNA constitutes the minimal RISC and may subsequently dissociate from DICER1 and TARBP2. May also play a role in the production of short interfering RNAs (siRNAs) from double-stranded RNA (dsRNA) by DICER1. Binds to the HIV-1 TAR RNA which is located in the long terminal repeat (LTR) of HIV-1, and stimulates translation of TAR-containing RNAs. This is achieved in part at least by binding to and inhibiting EIF2AK2/PKR, thereby reducing phosphorylation and inhibition of EIF2S1/eIF-2-alpha. May also promote translation of TAR-containing RNAs independently of EIF2AK2/PKR.

## TARBP2 / TRBP2 Antibody (clone 2G10) - References

Gatignol A., et al. Science 251:1597-1600(1991).
Gatignol A., et al. Submitted (APR-2000) to the EMBL/GenBank/DDBJ databases.
Kozak C.A., et al. Genomics 25:66-72(1995).
Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Mural R.J., et al. Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.