Datasheet: VPA00174K

**Description:**
mTOR ANTIBODY WITH CONTROL LYSATE

**Specificity:**
mTOR

**Format:**
Purified

**Product Type:**
PrecisionAb™ Polyclonal

**Isotype:**
Polyclonal IgG

**Quantity:**
10 Westerns

**Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

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<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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<td>1/1000</td>
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**PrecisionAb antibodies have been extensively validated for the western blot application.**
The antibody has been validated at the suggested dilution. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependant on sample type.

**Target Species**

Human

**Species Cross Reactivity**

Reacts with: Mouse

*N.B.* Antibody reactivity and working conditions may vary between species.

**Product Form**
Purified IgG - liquid

**Preparation**
100μl Rabbit polyclonal antibody purified by affinity chromatography

**Buffer Solution**
Phosphate buffered saline

**Preservative Stabilisers**
0.09% Sodium Azide (NaN₃)  
1% Bovine Serum Albumin

**Immunogen**
Synthetic peptide corresponding to amino acids 2440-2457 of human mTOR

**External Database Links**

**UniProt:**
P42345  Related reagents

**Entrez Gene:**
2475  MTOR  Related reagents

**Synonyms**
FRAP, FRAP1, FRAP2

Page 1 of 3
**Specificity**

Rabbit anti Human mTOR antibody recognizes the Serine/threonine-protein kinase mTOR, also known as FK506-binding protein 12-rapamycin complex-associated protein 1, FKBP12-rapamycin complex-associated protein, mammalian target of rapamycin, mechanistic target of rapamycin, rapamycin, FKBP12 target 1 and rapamycin target protein 1. mTOR belongs to a family of phosphatidylinositol kinase-related kinases. These kinases mediate cellular responses to stresses such as DNA damage and nutrient deprivation. This protein, encoded by the MTOR (FRAP1) gene, acts as the target for the cell-cycle arrest and immunosuppressive effects of the FKBP12-rapamycin complex. The ANGPTL7 gene is located in an intron of MTOR (provided by RefSeq, Sep 2008).

Rabbit anti Human mTOR antibody detects a band of 273 kDa. The antibody has been extensively validated for western blotting using whole cell lysates. This antibody is available with a positive control lysate, in a smaller trial size, and as a standalone antibody.

**Western Blotting**

Anti mTOR detects a band of approximately 273 kDa in HeLa cell lysates.

**Instructions For Use**

Please refer to the PrecisionAb western blotting protocol. For additional information on secondary antibody dilution and exposure time see product web page.

**Lysate Composition**

400μg HeLa lysate lyophilized in RIPA buffer.

**Lysate Reconstitution**

- If using DDT reconstitute the lyophilized lysate with 190μl DI H₂O, add 200μl 2x Laemmli Sample Buffer and 10μl 2M DTT.
- If using BME reconstitute the lyophilized lysate with 180μl DI H₂O, add 200μl 2x Laemmli Sample Buffer and 20μl BME.

Heat at 95°C for 5 minutes. For 10 well mini gels load 25μl. For other gel and comb formats please refer to the PrecisionAb western blotting protocol.

**Storage**

Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles.

Lysate: Store lyophilized lysate at -20°C. After reconstitution aliquot and store at -20°C for up to 3 months or at -80°C for longer term storage.

**Shelf Life**

As supplied, 12 months from date of despatch.

**Acknowledgements**

PrecisionAb™ is a trademark of Bio-Rad Laboratories.

**Health And Safety Information**


**Regulatory**

For research purposes only

**Related Products**

**Recommended Secondary Antibodies**

Goat Anti Rabbit IgG (H/L) (STAR208...) HRP