

Anti-Raptor Antibody [JE59-39]

HA722028



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 149 kDa
Clone number:	JE59-39

Description: RPTOR encodes part of a signaling pathway regulating cell growth which responds to nutrient and insulin levels. RPTOR is an evolutionarily conserved protein with multiple roles in the mTOR pathway. The adapter protein and mTOR kinase form a stoichiometric complex. The encoded protein also associates with eukaryotic initiation factor 4E-binding protein-1 and ribosomal protein S6 kinase. It upregulates S6 kinase, the downstream effector ribosomal protein, and it downregulates the mTOR kinase. RPTOR also has a positive role in maintaining cell size and mTOR protein expression. The association of mTOR and RPTOR is stabilized by nutrient deprivation and other conditions which suppress the mTOR pathway. Multiple transcript variants exist for this gene which encode different isoforms.

Immunogen: Synthetic peptide within Human Raptor aa 1,286-1,335 / 1,335.

Positive control: 293T cell lysate, K-562 cell lysate, Neuro-2a cell lysate, mouse brain tissue lysate, rat brain tissue lysate, mouse brain tissue.

Subcellular location: Lysosome membrane, Cytoplasm, Cytoplasmic granule.

Database links: SwissProt: Q8N122 Human | Q8K4Q0 Mouse
Entrez Gene: 287871 Rat

Recommended Dilutions:

WB	1:1,000
IHC-P	1:500

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders: 0086-571-88062880

Technical: 0086-571-89986345

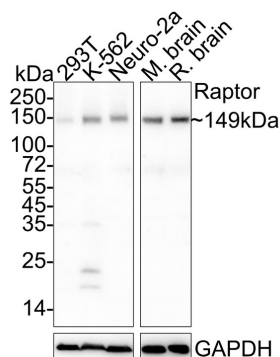
Service mail: support@huabio.cn

华安生物
HUABIO
www.huabio.cn

Applications: WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation

Images

Fig1: Western blot analysis of Raptor on different lysates with Rabbit anti-Raptor antibody (HA722028) at 1/2,000 dilution.



Lane 1: 293T cell lysate (30 µg/Lane)
 Lane 2: K-562 cell lysate (30 µg/Lane)
 Lane 3: Neuro-2a cell lysate (30 µg/Lane)
 Lane 4: Mouse brain tissue lysate (40 µg/Lane)
 Lane 5: Rat brain tissue lysate (40 µg/Lane)

Predicted band size: 149 kDa
 Observed band size: 149 kDa

Exposure time: 3 minutes; ECL: K1802;
 4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA722028) at 1/2,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

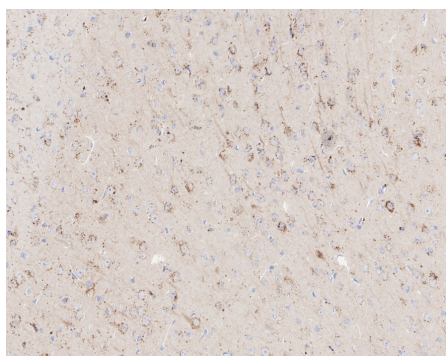


Fig2: Immunohistochemical analysis of paraffin-embedded mouse brain tissue with Rabbit anti-Raptor antibody (HA722028) at 1/500 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA722028) at 1/500 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Han H et al. N7-methylguanosine tRNA modification promotes esophageal squamous cell carcinoma tumorigenesis via the RPTOR/ULK1/autophagy axis. Nat Commun. 2022 Mar
2. Yin Y et al. RPTOR methylation in the peripheral blood and breast cancer in the Chinese population. Genes Genomics. 2022 Apr

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

华安生物
HUABIO
www.huabio.cn

Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation