



# mTOR Rabbit mAb

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Catalog No                  | YP-rAb-17818                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Isotype                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Reactivity                  | Human,Mouse,Rat,Chicken,Bovine,Pig                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Applications                | WB,IHC,IF,IP,ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Gene Name                   | MTOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Protein Name                | Serine/threonine-protein kinase mTOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Purification Process        | Protein A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Specificity                 | Endogenous                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Formulation                 | PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Source                      | Monoclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Dilution                    | IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Concentration               | 0.5 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Purity                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Storage Stability           | -15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Synonyms                    | MTOR ; FRAP ; FRAP1 ; FRAP2 ; RAFT1 ; RAPT1 ; Serine/threonine-protein kinase mTOR ; FK506-binding protein 12-rapamycin complex-associated protein 1 ; FKBP12-rapamycin complex-associated protein ; Mammalian target of rapamycin ; mTOR ; Mechanistic tar                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Observed Band               | 260kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Calculated Molecular Weight | 289kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Cell Pathway                | Cytoplasm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Tissue Specificity          | Expressed in numerous tissues, with highest levels in testis.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Function                    | Acts as the target for the cell-cycle arrest and immunosuppressive effects of the FKBP12-rapamycin complex. Part of the TORC2 complex which plays a critical role in AKT1 Ser-473 phosphorylation, and may modulate the phosphorylation of PKCA and regulate actin cytoskeleton organization.,similarity:Belongs to the PI3/PI4-kinase family.,similarity:Contains 1 FAT domain.,similarity:Contains 1 FATC domain.,similarity:Contains 1 PI3K/PI4K domain.,similarity:Contains 7 HEAT repeats.,subunit:Interacts with the FKBP12-rapamycin complex. Binds UBQLN1. Forms part of the mammalian target of rapamycin 2 complex (TORC2) comprised of FRAP1, GBL, PRR5, RICTOR and SIN. TORC2 does not bind to |





and is not sensitive to FKBP12-rapamycin. Binds directly to PRR5 and RICTOR within the TORC2 complex.,tissue specificity:Expressed in numerous tissues, with highest levels in testis.,

## Background

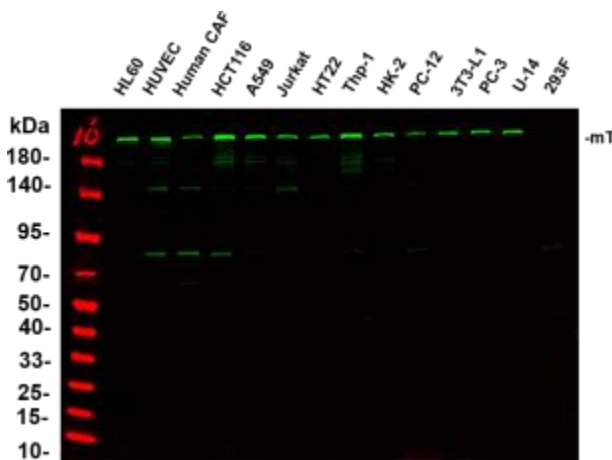
The protein encoded by this gene belongs to a family of phosphatidylinositol kinase-related kinases. These kinases mediate cellular responses to stresses such as DNA damage and nutrient deprivation. This protein acts as the target for the cell-cycle arrest and immunosuppressive effects of the FKBP12-rapamycin complex. The ANGPTL7 gene is located in an intron of this gene. [provided by RefSeq, Sep 2008],

## matters needing attention

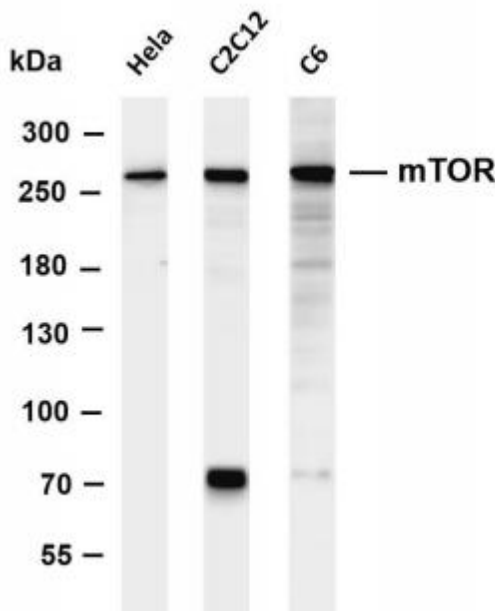
Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

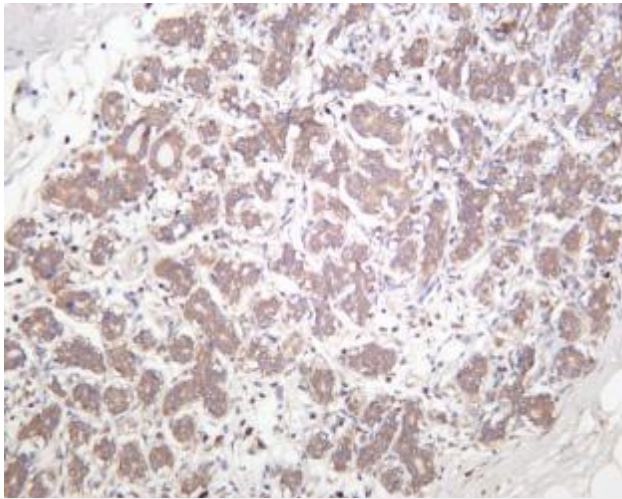


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4 °C, over night with a 1:5000 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody

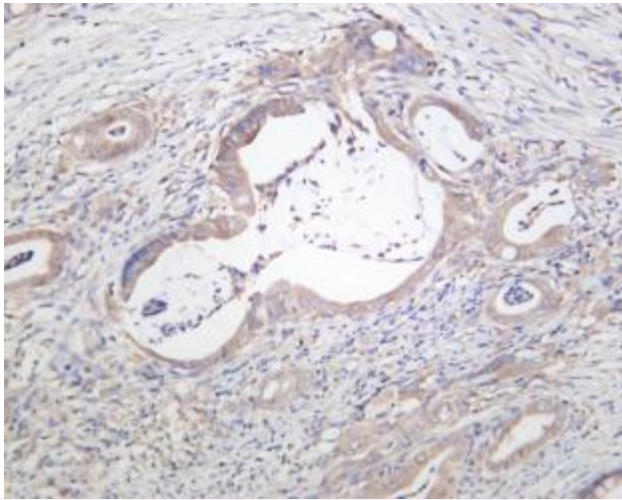


Various whole cell lysates were separated by 4-8% SDS-PAGE, and the membrane was blotted with anti-mTOR antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: C2C12 Lane 4: C6 Predicted band size: 289kDa Observed band size: 260kDa

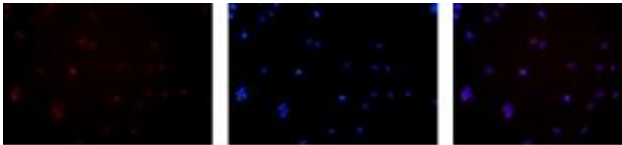




Human breast carcinoma was stained with anti-mTOR rabbit antibody



Human colon carcinoma was stained with anti-mTOR rabbit antibody



A

B

C

Immunofluorescence analysis of HEK293. Picture A: mTOR antibody (red). Picture B: DAPI (blue). Picture C: Merge of A+B

