

ABfinity™ mTOR Recombinant Rabbit Oligoclonal Antibody

Store at 2°C to 8°C (short-term), or -20°C (long-term)

Catalog Number 710408

Pub. No. MAN0007684 Rev. 1.00

Clonality: Oligoclonal	Quantity: 100 µg	Volume: 200 µL	Concentration: 0.5 mg/mL
Host/Class: Rabbit IgG	Reactivity: Human mTOR	Predicted Reactivity: Human, Mouse	

Product Description

Mammalian target of rapamycin (mTOR) is a serine/threonine kinase that plays a key role in cell growth, cell proliferation, and protein synthesis. mTOR mediates phosphoinositide 3-kinase and Akt/PKB signaling, resulting in phosphorylation of 4EBP1, and initiation of mRNA translation. A second pathway involves regulation of ribosomal S6 kinase, which affects ribosome biogenesis and translation elongation.

Product Specifications

Immunogen:	Recombinant protein corresponding to amino acids 1126–1411 of human mTOR.
Apparent MW:	~289 kDa
Gene ID:	2475
Protein Accession No.:	P42345
Sequence Identity:	Human
Isotype:	IgG ₁
Lot:	See product label

Product Applications

Application	Species	Test Material	Concentration
Western blotting	Human	Cos-7, and U87MG cells	2–3 µg/mL
Indirect ELISA	Human	Recombinant protein	1.5 × 10 ⁻⁴ to 3 µg/mL
Immunocyto-chemistry	Human	HeLa cells	0.5 µg/mL
Flow cytometry	Human	HeLa cells	1 µg/mL for 1 × 10 ⁻⁶ cells

Storage and handling

Store the antibody at 2°C to 8°C for up to 1 month, or -20°C for long storage. Avoid repeated freezing and thawing.

Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

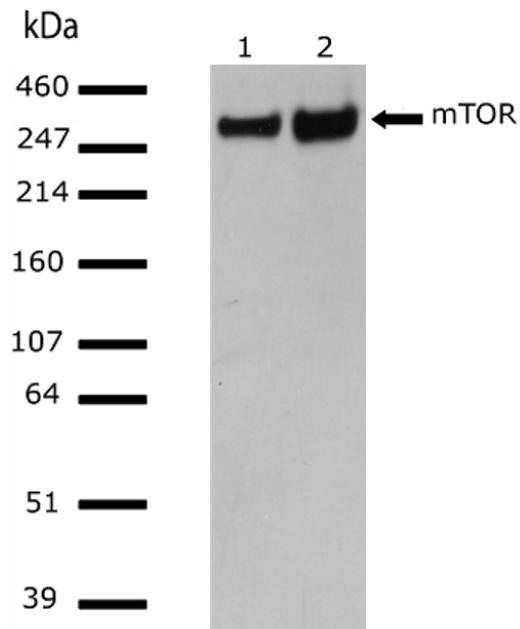


Figure 1 Western blot analysis of ABfinity™ mTOR Recombinant Rabbit Oligoclonal Antibody (Cat. no. 710408).

Western blot analysis was performed on whole COS-7 and U87MG lysate. Endogenous level of mTOR was detected at ~289 kDa using ABfinity™ mTOR Recombinant Rabbit Oligoclonal Antibody at a concentration of 2 µg/mL. The blot was developed using enhanced chemiluminescence (ECL) method.

Storage Buffer

Phosphate buffered saline (PBS) with 0.09% sodium azide.

CAUTION! Sodium azide is extremely toxic and may react with lead and copper plumbing to form highly explosive metal azides. Properly dispose of solutions containing sodium azide. Read the Safety Data Sheet (SDS) and follow the handling instructions. Wear appropriate protective eyewear, clothing and gloves. SDSs are available at www.lifetechnologies.com/support.

Product Documentation

To obtain a Certificate of Analysis or Safety Data Sheet (SDS), visit <http://www.lifetechnologies.com/support>.

Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at www.lifetechnologies.com/termsandconditions. If you have any questions, please contact Life Technologies at www.lifetechnologies.com/support.

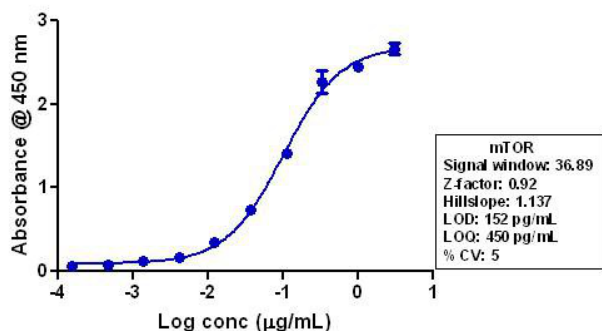


Figure 2 Indirect ELISA of ABfinity™ mTOR Recombinant Rabbit Oligoelonal Antibody [Cat. no. 710408].

Indirect ELISA was performed using various dilutions of ABfinity™ mTOR Recombinant Rabbit Oligoelonal Antibody to detect mTOR recombinant protein coated onto the plate. A non-linear regression analysis was performed (4 PL), LOD, and LOQ for the antibody was determined.

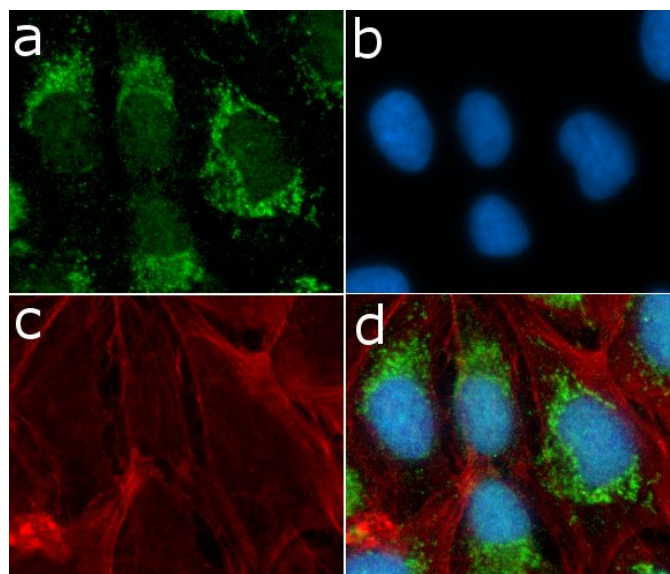


Figure 3 Immunocytochemistry analysis of mTOR ABfinity™ Recombinant Rabbit Monoclonal Antibody [Cat. no. 710408].

Immunocytochemistry analysis of HeLa cells stained with mTOR ABfinity™ Recombinant Rabbit Monoclonal Antibody using a: Alexa Fluor® 488 goat anti-rabbit as a secondary antibody (green). b: DAPI stained HeLa nuclei (blue). c: Alexa Fluor® 594 phalloidin was used to stain actin (red). d: Composite image of cells showing cytoplasmic localization of mTOR.

Explanation of Symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer		Catalog number		Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

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