

# mTOR Polyclonal Antibody

## Product Details

Size	100 µg
Species Reactivity	Human, Mouse, Non-human primate, Rat
Published Species	Rat, Human
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Immunogen corresponds to amino acids 1223-1290 of human mTOR.
Form	Liquid
Concentration	1 mg/mL
Purification	Protein G
Storage buffer	PBS with 1mg/mL BSA, 30% glycerol
Contains	0.05% sodium azide
Storage conditions	-20°C
RRID	AB_325371

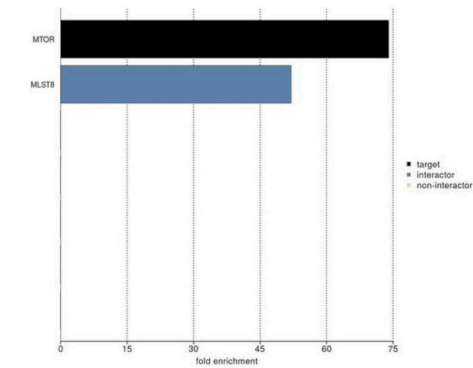
Applications	Tested Dilution	Publications
Western Blot (WB)	1:100-1:1,000	5 Publications
Immunocytochemistry (ICC/IF)	1:50-1:200	-
Immunoprecipitation (IP)	2 µg	-

## Product Specific Information

3-8% Tris-Acetate Gel is recommended for Western blot.

PA1-518 detects a predominant band at ~290kD corresponding to mTOR. Other lower MW nonspecific bands of unknown identity were also detected at ~65kD and ~35kD in some cell lysates.

Product Images For mTOR Polyclonal Antibody

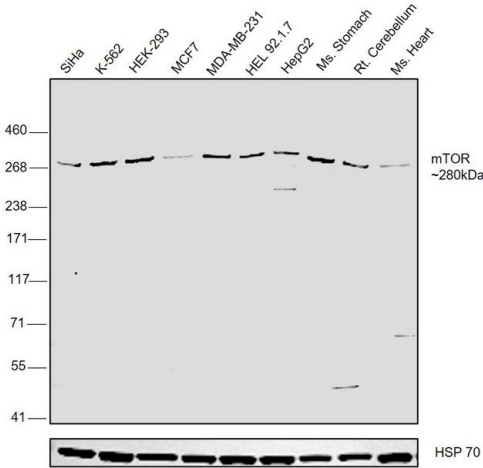


mTOR Antibody (PA1-518)

IP-MS enrichment of MTOR (LFQ intensity): MTOR was enriched 74-fold from HCT116 lysate compared to background proteins, using the optimized IP-MS workflow with Pierce MS-Compatible Magnetic IP Kit protein A/G (Product # 90409) and MTOR antibody (Product # PA1-518). See more information on IP-MS verification of antibody selectivity. {IP-MS}

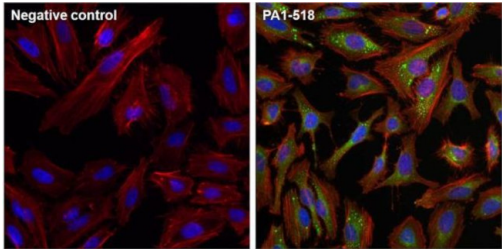
mTOR Antibody (PA1-518) in WB

Western blot was performed using Anti-mTOR Polyclonal Antibody (Product # PA1-518) and a ~280kDa band corresponding to Serine/threonine-protein kinase mTOR was observed across cell lines and tissues tested . Whole cell extracts (30 µg lysate) of SiHa (Lane 1), K-562 (Lane 2), HEK-293 (Lane 3), MCF7 (Lane 4), MDA-MB-231 (Lane 5), HEL 92.1.7 (Lane 6), Hep G2 (Lane 7), Mouse Stomach (Lane 8), Rat Cerebellum (Lane 9), Mouse Heart (Lane 10) were electrophoresed using NuPAGE™ 3-8% Tris-Acetate Protein Gel (Product # EA0378BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # LC2002) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1000) and detected by chemiluminescence with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 1:4000) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Reagent Kit (Product # WP20005).



mTOR Antibody (PA1-518) in ICC/IF

Immunofluorescent analysis of mTOR (green) in HeLa cells. The cells were fixed with 4% paraformaldehyde, permeabilized with 0.1% Triton X-100 in PBS, and blocked with 1% Blocker BSA (Product # 37525), each for 15 minutes at room temperature. Cells were stained with an mTOR polyclonal antibody (Product # PA1-518) at a concentration of 10 µg/mL in 1% Blocker BSA in PBS (right panel), or incubated in blocking buffer alone as a negative control (left panel) overnight at 4C, and then incubated with a Dylight 488-conjugated goat anti-rabbit IgG secondary antibody (Product # 35552) at a dilution of 1:1000 for 1 hour at room temperature. F-Actin (red) was stained with a DyLight 554-conjugated phalloidin control (Product # 21834) and nuclei (blue) were stained with DAPI (Product # 46190).



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Western Blot (5)

<p>Cell death &amp; disease</p> <p><b>PTPN14 promotes gastric cancer progression by PI3KA/AKT/mTOR pathway.</b></p> <p>"PA1-518 was used in Western blotting following immunoprecipitation to provide a theoretical basis to better understand the occurrence and development of gastric cancer."</p> <p>Authors: Li H,Guan B,Liu S,Liu H,Song L,Zhang G,Zhao R,Zhou C,Gao P</p>	<p>Year 2023</p> <p>Species Human</p>
<p>Pharmaceuticals (Basel, Switzerland)</p> <p><b>Partial Synthetic PPAR<math>\gamma</math> Derivative Ameliorates Aorta Injury in Experimental Diabetic Rats Mediated by Activation of miR-126-5p Pi3k /AKT/PDK 1/mTOR Expression.</b></p> <p>"PA1-518 was used in Western Blotting to reveal that HFD/STZ-induced T2D increased fasting blood glucose, ET-1, ICAM-1, E-selectin, and VIP levels, while decreasing the expression of both microRNA126-5p and p-AKT/p-Pi3k/p-PDK-1/p-mTOR phosphorylation."</p> <p>Authors: Ahmed YM,Orfali R,Abdelwahab NS,Hassan HM,Rateb ME,AboulMagd AM</p>	<p>Year 2022</p> <p>Species Rat</p>

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