Datasheet for ABIN2855088

anti-MTOR antibody (C-Term)

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Overview

Quantity:	100 µL
Target:	MTOR (mTOR)
Binding Specificity:	C-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MTOR antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunoprecipitation (IP), Immunocytochemistry (ICC), Chromatin Immunoprecipitation (ChIP)

Product Details

Immunogen:	Recombinant protein encompassing a sequence within the C-terminus region of human mTOR. The exact sequence is proprietary.
Isotype:	IgG
Characteristics:	Rabbit Polyclonal antibody to mTOR (mechanistic target of rapamycin (serine/threonine kinase)) mTOR antibody [C3], C-term
Purification:	Purified by antigen-affinity chromatography.

Target Details

Target:	MTOR (mTOR)
Alternative Name:	mTOR (mTOR Products)
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. Cellular Localization: Endoplasmic reticulum membrane, Peripheral membrane protein, Cytoplasmic side , Golgi apparatus membrane, Peripheral membrane protein, Cytoplasmic side , Mitochondrion outer membrane, Peripheral membrane protein, Cytoplasmic side
Molecular Weight:	289 kDa
Gene ID:	2475
Pathways:	PI3K-Akt Signaling, RTK Signaling, AMPK Signaling, Interferon-gamma Pathway, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Regulation of Actin Filament Polymerization, Regulation of Muscle Cell Differentiation, Regulation of Cell Size, Skeletal Muscle Fiber Development, Regulation of Carbohydrate Metabolic Process, Autophagy, CXCR4-mediated Signaling Events, BCR Signaling, Warburg Effect

Application Details

Application Notes:	Suggested dilution Reference ChIP assay Assay-dependent dilution ICC/IF 1:100-1:1000* IHC (Formalin-fixed paraffin-embedded sections) 1:100-1:1000* Immunoprecipitation 1:100-1:500* Western blot 1:500-1:3000* Not tested in other applications. *Optimal dilutions/concentrations should be determined by the researcher.Suggested dilutionReferenceChIP assayAssay-dependent dilution ICC/IF1:100-1:1000* IHC (Formalin-fixed paraffin-embedded sections)1:100-1:1000* Immunoprecipitation1:100-1:500* Western blot1:500-1:3000*
Comment:	Positive Control: 293T , A431 , HeLa , HepG2 , mouse brain , *Flag-human mTOR transfected 293T
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	1XPBS, 20 % Glycerol (pH 7). 0.025 % ProClin 300 was added as a preservative.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Keep as concentrated solution. Aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

Publications

Product cited in:

Wang, Cao, Shu, Zhu, Peng, Ran, Wu, Luo, Zuo, Luo, Zhou, Shi, Weng, Huang, He, Fan: "Long non-coding RNA (lncRNA) H19 induces hepatic steatosis through activating MLXIPL and mTORC1 networks in hepatocytes." in: **Journal of cellular and molecular medicine**, Vol. 24, Issue 2, pp. 1399-1412, (2020) (PubMed).

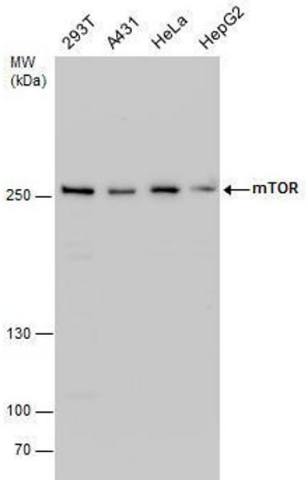
Cheung, Hsu, Lin, Chen, Wang, Huang, Juan: "ZNF322A-mediated protein phosphorylation induces autophagosome formation through modulation of IRS1-AKT glucose uptake and HSP-elicited UPR in lung cancer." in: **Journal of biomedical science**, Vol. 27, Issue 1, pp. 75, (2020) (PubMed).

Peng, Chen, Wang, Zhu, Wu, Luo, Zuo, Luo, Zhou, Shi, Weng, Huang, He, Fan: "Bone morphogenetic protein 4 (BMP4) alleviates hepatic steatosis by increasing hepatic lipid turnover and inhibiting the mTORC1 signaling axis in hepatocytes." in: **Aging**, Vol. 11, Issue 23, pp. 11520-11540, (2019) (PubMed).

Li, Yu, Jiao, Wang, Zhang, Sun: "Vandetanib (ZD6474) induces antiangiogenesis through mTOR-HIF-1 alpha-VEGF signaling axis in breast cancer cells." in: **OncoTargets and therapy**, Vol. 11, pp. 8543-8553, (2018) (PubMed).

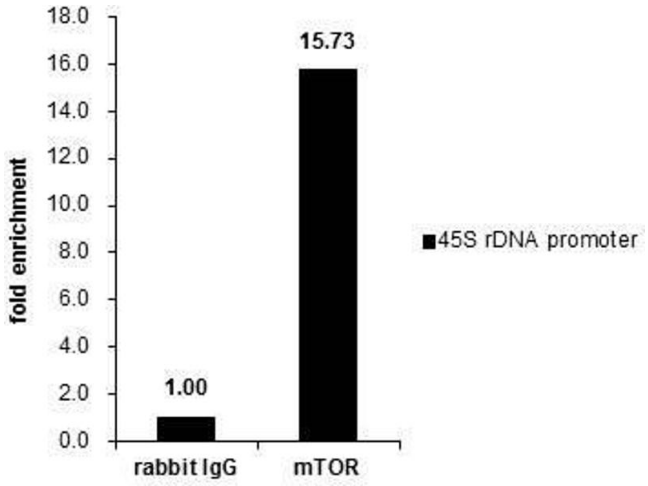
Xu, Wu, Zheng, Yu, Yang, Yao, Zhou, Ching, Lau: "Proteome profiling of cadmium-induced apoptosis by antibody array analyses in human bronchial epithelial cells." in: **Oncotarget**, Vol. 7, Issue 5, pp. 6146-58, (2017) (PubMed).

Images



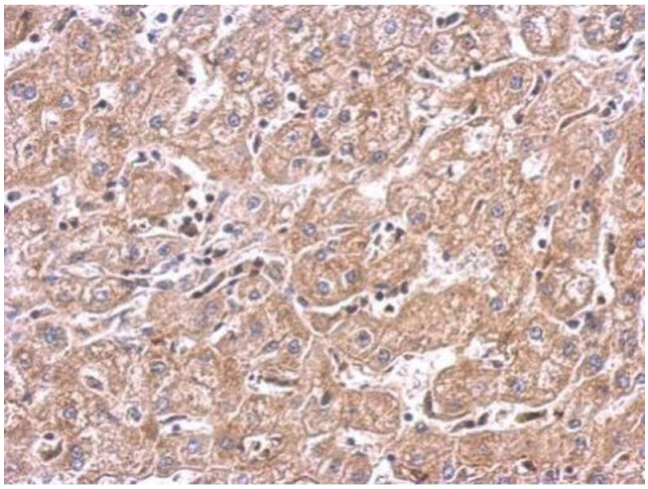
Western Blotting

Image 1. WB Image mTOR antibody detects mTOR protein by western blot analysis. Various whole cell extracts (30 µg) were separated by 5% SDS-PAGE, and the membrane was blotted with mTOR antibody , diluted by 1:1000.



Chromatin Immunoprecipitation

Image 2. ChIP Image Cross-linked ChIP was performed with 293T chromatin extract and 5 µg of either control rabbit IgG or anti-mTOR antibody. The precipitated DNA was detected by PCR with primer set targeting to 45S rDNA promoter .



Immunohistochemistry

Image 3. IHC-P Image mTOR antibody detects FRAP1 protein at cytosol on human hepatoma by immunohistochemical analysis. Sample: Paraffin-embedded hepatoma. mTOR antibody , dilution: 1:500.

Please check the product details page for more images. Overall 15 images are available for ABIN2855088.