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MAPK15 Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AM1855b

Specification

MAPK15 Antibody - Product Information

Application	**IF, WB,E**
Primary Accession	Q8TD08
Other Accession	NP_620590.2
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1,K**
Calculated MW	**59832**

MAPK15 Antibody - Additional Information

Gene ID 225689

Other Names
Mitogen-activated protein kinase 15, MAP kinase 15, MAPK 15, Extracellular signal-regulated kinase 7, ERK-7, Extracellular signal-regulated kinase 8, ERK-8, MAPK15, ERK7, ERK8

Target/Specificity
This MAPK15 monoclonal antibody is generated from mouse immunized with MAPK15 recombinant protein.

Dilution
IF~~1:10~50
WB~~1:500~1000
E~~Use at an assay dependent concentration.

Format
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
MAPK15 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MAPK15 Antibody - Protein Information

Name MAPK15 (HGNC:24667)

Function Atypical MAPK protein that regulates several process such as autophagy, ciliogenesis,

protein trafficking/secretion and genome integrity, in a kinase activity-dependent manner (PubMed:20733054, PubMed:21847093, PubMed:22948227, PubMed:24618899, PubMed:29021280). Controls both, basal and starvation-induced autophagy throught its interaction with GABARAP, MAP1LC3B and GABARAPL1 leading to autophagosome formation, SQSTM1 degradation and reduced MAP1LC3B inhibitory phosphorylation (PubMed:22948227). Regulates primary cilium formation and the localization of ciliary proteins involved in cilium structure, transport, and signaling (PubMed:29021280). Prevents the relocation of the sugar-adding enzymes from the Golgi to the endoplasmic reticulum, thereby restricting the production of sugar- coated proteins (PubMed:24618899). Upon amino-acid starvation, mediates transitional endoplasmic reticulum site disassembly and inhibition of secretion (PubMed:21847093). Binds to chromatin leading to MAPK15 activation and interaction with PCNA, that which protects genomic integrity by inhibiting MDM2-mediated degradation of PCNA (PubMed:20733054). Regulates DA transporter (DAT) activity and protein expression via activation of RhoA (PubMed:28842414). In response to H(2)O(2) treatment phosphorylates ELAVL1, thus preventing it from binding to the PDCD4 3'UTR and rendering the PDCD4 mRNA accessible to miR-21 and leading to its degradation and loss of protein expression (PubMed:26595526). Also functions in a kinase activity-independent manner as a negative regulator of growth (By similarity). Phosphorylates in vitro FOS and MBP (PubMed:11875070, PubMed:16484222, PubMed:19166846, PubMed:20638370). During oocyte maturation, plays a key role in the microtubule organization and meiotic cell cycle progression in oocytes, fertilized eggs, and early embryos (By similarity). Interacts with ESRRA promoting its re-localization from the nucleus to the cytoplasm and then prevents its transcriptional activity (PubMed:21190936).

Cellular Location
Cytoplasm, cytoskeleton, cilium basal body. Cell junction, tight junction. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole Cytoplasmic vesicle, autophagosome. Golgi apparatus. Nucleus. Cytoplasm. Cytoplasm, cytoskeleton, spindle {ECO:0000250|UniProtKB:Q80Y86}. Note=Co-localizes to the cytoplasm only in presence of ESRRA (PubMed:21190936) Translocates to the nucleus upon activation (PubMed:20638370). At prometaphase I, metaphase I (MI), anaphase I, telophase I, and metaphase II (MII) stages, is stably detected at the spindle (By similarity). {ECO:0000250|UniProtKB:Q80Y86, ECO:0000269|PubMed:20638370, ECO:0000269|PubMed:21190936}

Tissue Location
Widely expressed with a maximal expression in lung and kidney.

MAPK15 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MAPK15 Antibody - Images

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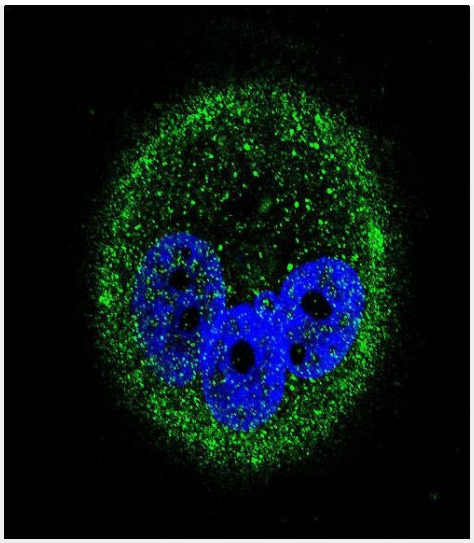
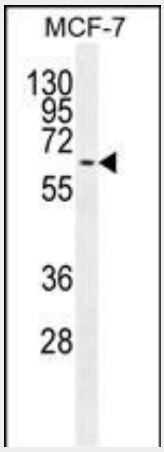


Confocal immunofluorescent analysis of MAPK15 Antibody (Cat#AM1855b) with MCF-7 cell followed by Alexa Fluor® 488-conjugated goat anti-mouse IgG (green). DAPI was used to stain the cell nuclear (blue).



MAPK15 Antibody (Cat. #AM1855b) western blot analysis in MCF-7 cell line lysates (35µg/lane).This demonstrates the MAPK15 antibody detected the MAPK15 protein (arrow).

MAPK15 Antibody - Background

In vitro, phosphorylates MBP.