

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

Format

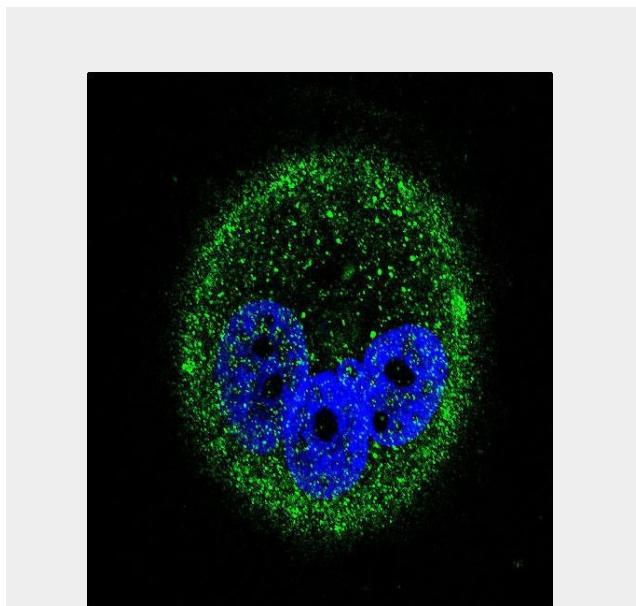
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

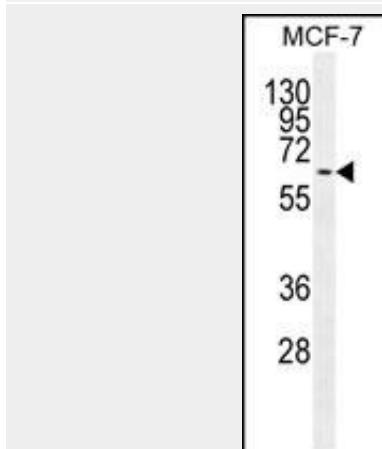
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

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



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.

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:22948227, PubMed:24618899, PubMed:29021280, PubMed:21847093, PubMed:20733054). Controls both, basal and starvation-induced autophagy through 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:<a href="http://www.uniprot.org/c

itations/20733054" target="_blank">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:20638370, PubMed:19166846). 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 Cytometry](#)
- [Cell Culture](#)