

# MAPK15 Antibody

Mouse Monoclonal Antibody (Mab)

Catalog # AM1855b

## Product Information

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Application	WB, IF, E
Primary Accession	<a href="#">Q8TD08</a>
Other Accession	<a href="#">NP_620590.2</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,K
Clone Names	168CT10.6.6
Calculated MW	59832

## Additional Information

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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	WB~~1:500~1000 IF~~1:10~50 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.

## Protein Information

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Name	MAPK15 ( <a href="#">HGNC:24667</a> )
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: <a href="#">20733054</a> , PubMed: <a href="#">21847093</a> , PubMed: <a href="#">22948227</a> , PubMed: <a href="#">24618899</a> , PubMed: <a href="#">29021280</a> ). 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:[20733054](#)). Regulates DA transporter (DAT) activity and protein expression via activation of RhoA (PubMed:[28842414](#)). In response to H<sub>2</sub>O<sub>2</sub> 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}

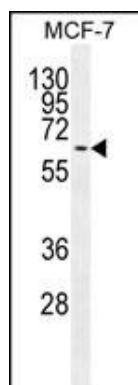
## Tissue Location

Widely expressed with a maximal expression in lung and kidney.

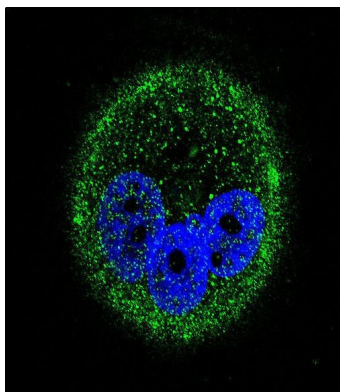
## Background

In vitro, phosphorylates MBP.

## Images



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).



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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.