Datasheet for ABIN7549416

# MAPK15 Protein (AA 1-544) (His tag)

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## Overview

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| Quantity: | 1 mg |
| Target: | MAPK15 |
| Protein Characteristics: | AA 1-544 |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This MAPK15 protein is labelled with His tag. |
| Application: | Western Blotting (WB), SDS-PAGE (SDS) |

## Product Details

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| Purpose: | Custom-made recombinat MAPK15 Protein expressed in mammalien cells. |
| Sequence: | MCTVVDPRIV RRYLLRRQLG QGAYGIVWKA VDRRTGEVVA IKKIFDAFRD KTDAQRTFRE ITLLQEFGDH PNIISLLDVI RAENDRDIYL VFEFMDTDLN AVIRKGGLLQ DVHVRSIFYQ LLRATRFLHS GHVVHRDQKP SNVLLDANCT VKLCDFGLAR SLGDLPEGPE DQAVTEYVAT RWYRAPEVLL SSHRYTLGVD MWSLGCILGE MLRGRPLFPG TSTLHQLELI LETIPPPSEE DLLALGSGCR ASVLHQLGSR PRQTLDALLP PDTSPEALDL LRRLLVFAPD KRLSATQALQ HPYVQRFHCP SDEWAREADV RPRAHEGVQL SVPEYRSRVY QMILECGGSS GTSREKGPEG VSPSQAHLHK PRADPQLPSR TPVQGPRPRP QSSPGHDPAE HESPRAAKNV PRQNSAPLLQ TALLGNGERP PGAKEAPPLT LSLVKPSGRG AAPSLTSQAA AQVANQALIR GDWNRGGGVR VASVQQVPPR LPPEARPGRR MFSTSALQGA QGGARALLGG YSQAYGTVCH SALGHLPLLE GHHV **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary.** |

## Product Details

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| | **In case you have a special request, please contact us.** |
| Characteristics: | Key Benefits:<br>• Made to order protein - from design to production - by highly experienced protein experts.<br>• Protein expressed in mammalien cells and purified in one-step affinity chromatography<br>• The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.<br>• State-of-the-art algorithm used for plasmid design (Gene synthesis).<br><br>This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.<br><br>If you are not interested in a full length protein, please contact us for individual protein fragments.<br><br>The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified. |
| Purity: | > 90 % as determined by Bis-Tris Page, Western Blot |
| Grade: | custom-made |

## Target Details

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| Target: | MAPK15 |
| Alternative Name: | MAPK15 (MAPK15 Products) |
| Background: | Mitogen-activated protein kinase 15 (MAP kinase 15) (MAPK 15) (EC 2.7.11.24) (Extracellular signal-regulated kinase 7) (ERK-7) (Extracellular signal-regulated kinase 8) (ERK-8),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 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 |

## Target Details

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| | 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: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). {ECO:0000250\|UniProtKB:Q80Y86, ECO:0000250\|UniProtKB:Q9Z2A6, ECO:0000269\|PubMed:11875070, ECO:0000269\|PubMed:16484222, ECO:0000269\|PubMed:19166846, ECO:0000269\|PubMed:20638370, ECO:0000269\|PubMed:20733054, ECO:0000269\|PubMed:21190936, ECO:0000269\|PubMed:21847093, ECO:0000269\|PubMed:22948227, ECO:0000269\|PubMed:24618899, ECO:0000269\|PubMed:26595526, ECO:0000269\|PubMed:28842414, ECO:0000269\|PubMed:29021280}. |
| Molecular Weight: | 59.8 kDa |
| UniProt: | Q8TD08 |

## Application Details

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| Application Notes: | In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though. |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |
| Buffer: | The buffer composition is at the discretion of the manufacturer. |
| Handling Advice: | Avoid repeated freeze-thaw cycles. |

## Handling

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| Storage: | -80 °C |
| Storage Comment: | Store at -80°C. |
| Expiry Date: | 12 months |

 