

Datasheet for ABIN7563735

## MAPKAP Kinase 3 Protein (AA 1-384) (His tag)



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### Overview

Quantity:	1 mg
Target:	MAPKAP Kinase 3 (MAPKAPK3)
Protein Characteristics:	AA 1-384
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This MAPKAP Kinase 3 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

### Product Details

Purpose:	Custom-made recombinat Mapkapk3 Protein expressed in mammalian cells.
Sequence:	<p>MDGETAGEKG SLVPPPGALG GSALGGAPAP GVRREPCKYA VTDDYQLSKQ VLGLGVNGKV</p> <p>LECYHRRSGQ KCALKLLYDS PKARQEVDDH WQASGGPHIV RILDVYENMH HGKRCLLIVM</p> <p>ECMEGGELFS RIQERGDQAF TEREAAEIMR DIGTAIQFLH SRNIAHRDVK PENLLYTSKE</p> <p>KDAVLKLTDF GFAKETTQNA LQTPCYTPYY VAPEVLGPEK YDKSCDMWSL GVIMYILLCG</p> <p>FPPFYSNTGQ AISPGMKRRI RLGQYSFNP EWLDVSEDAK QLIRLLKTD PTERLTIMQF</p> <p>MNHPWINQSM VVPQTPLYTA RVLQEDKDHV DDVKEEMTSA LATMRVDYDQ VKIKDLKTSN</p> <p>NRLLNKRRKK QAGSSASQG CNNQ <b>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. In case you have a special request, please contact us.</b></p>
Characteristics:	Key Benefits:

## Product Details

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- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

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Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
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Grade:	custom-made
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## Target Details

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Target:	MAPKAP Kinase 3 (MAPKAPK3)
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Alternative Name:	Mapkapk3 ( <a href="#">MAPKAPK3 Products</a> )
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Background:	<p>MAP kinase-activated protein kinase 3 (MAPK-activated protein kinase 3) (MAPKAP kinase 3) (MAPKAP-K3) (MAPKAPK-3) (MK-3) (EC 2.7.11.1),FUNCTION: Stress-activated serine/threonine-protein kinase involved in cytokines production, endocytosis, cell migration, chromatin remodeling and transcriptional regulation. Following stress, it is phosphorylated and activated by MAP kinase p38-alpha/MAPK14, leading to phosphorylation of substrates. Phosphorylates serine in the peptide sequence, Hyd-X-R-X(2)-S, where Hyd is a large hydrophobic residue. MAPKAPK2 and MAPKAPK3, share the same function and substrate specificity, but MAPKAPK3 kinase activity and level in protein expression are lower compared to MAPKAPK2. Phosphorylates HSP27/HSPB1, KRT18, KRT20, RCSD1, RPS6KA3, TAB3 and TTP/ZFP36. Mediates phosphorylation of HSP27/HSPB1 in response to stress, leading to dissociate HSP27/HSPB1 from large small heat-shock protein (sHsps) oligomers and impair their chaperone activities and ability to protect against oxidative stress effectively. Involved in inflammatory response by regulating tumor necrosis factor (TNF) and IL6 production post-transcriptionally: acts by phosphorylating AU-rich elements (AREs)-binding proteins, such as</p>
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## Target Details

TTP/ZFP36, leading to regulate the stability and translation of TNF and IL6 mRNAs. Phosphorylation of TTP/ZFP36, a major post-transcriptional regulator of TNF, promotes its binding to 14-3-3 proteins and reduces its ARE mRNA affinity leading to inhibition of dependent degradation of ARE-containing transcript. Involved in toll-like receptor signaling pathway (TLR) in dendritic cells: required for acute TLR-induced macropinocytosis by phosphorylating and activating RPS6KA3. Also acts as a modulator of Polycomb-mediated repression. {ECO:0000269|PubMed:17906627, ECO:0000269|PubMed:20724476}.

Molecular Weight: 43.3 kDa

UniProt: [Q3UMW7](#)

Pathways: [MAPK Signaling](#), [Neurotrophin Signaling Pathway](#), [Activation of Innate immune Response](#), [Toll-Like Receptors Cascades](#)

## Application Details

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

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months