

# Recombinant Human MAPK13 protein (His tag)

Catalog Number:PDEH100395



**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

## Description

<b>Synonyms</b>	MAPK-13;MAPK13;p38delta;PRKM13;SAPK4
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Val 51-Leu 365
<b>Accession</b>	O15264
<b>Calculated Molecular Weight</b>	34.5 kDa
<b>Observed molecular weight</b>	41 kDa
<b>Tag</b>	N-His & C-His

## Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Please contact us for more information.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

## Background

The p38 family of mitogen-activated protein kinases (MAPK) includes p38 alpha (SAPK2a, CSBP), p38 beta (SAPK2b), p38 delta (SAPK4), and p38 gamma (SAPK3/ERK6). p38 alpha and p38 beta are widely expressed p38 isoforms that are involved in regulation of cell proliferation, differentiation, development, and response to stress. p38 delta, also known as MAPK13, is a regulator of differentiation-dependent gene expression in keratinocytes, and been as a regulator of surface epithelia differentiation and apoptosis. p38 delta protein is upregulated in Cholangiocarcinoma (CC) relative to hepatocellularcarcinoma (HCC) and to normal biliary tract tissues. p38 delta is important for motility and invasion of CC cells, suggesting that p38 delta may play an important role in CC metastasis. p38 delta is expressed in the epidermis, suggesting a role for p38 delta in regulating differentiation. p38 delta is the major p38 isoform driving suprabasal involucrin gene expression and that p38 delta directly regulates ERK1/2 activity via formation of a p38 delta-ERK1/2 complex. Recent emerging evidence suggests that the p38 stress MAPK pathway may function as a tumor suppressor through regulating Ras-dependent and -independent proliferation, transformation, invasion and cell death by isoform-specific mechanisms. p38 delta has important role in promoting cell proliferation and tumor development in epidermis and may have therapeutic implication for skin cancer.

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