Recombinant Human Mitogen-activated Protein Kinase 12

Cat. No. MAPK12-738H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human p38-gamma, full length, amino acids M1-L367, activated, untagged, was expressed in*E.coli*. MW = 42,352 Da.
Species	Human
Source	E.coli
ProteinLength	1-367 a.a.
Description	P38γ is a member of the p38 MAPK family which is activated in response to stress. p38γ gene was mapped to 22q13.3 and functions as a signal transducer during differentiation of myoblasts to myotubes. Enforced localization of p38γ in the nucleus or cytoplasm markedly attenuates the ability of the kinase to induce cell cycle arrest in fibroblasts. p38γ increases basal glucose uptake and decreases DNP- and contraction-stimulated glucose uptake, partially by affecting levels of glucose transporter expression in skeletal muscle.
Purification	GST-Affinity Chromatography.
Activation	with MKK6-S207D/T211D.
Product Identity	p38-gamma was confirmed as p38-gamma by mass spectroscopy LC-ESI-MS/MS.
Storage Buffer	50 mM HEPES pH 7.5, 100 mM NaCl, 5 mM DTT, 20% glycerol.

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Concentration	0.165 μg/μl (Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein).
Specific Activity	59 pmol/μg×min.
Storage	-80°C. Avoid repeated freeze-thaw cycles!
Full Length	Full L.

GENE INFORMATION

Gene Name	MAPK12 mitogen-activated protein kinase 12 [Homo sapiens]
Synonyms	MAPK12; mitogen-activated protein kinase 12; ERK3; ERK6; SAPK3; PRKM12; SAPK-3; P38GAMMA; stress-activated protein kinase 3; mitogen-activated protein kinase 3; EC 2.7.11.24
Gene ID	6300
mRNA Refseq	NM_002969
Protein Refseq	NP_002960
MIM	602399
UniProt ID	P53778
Chromosome Location	22q13.33
Pathway	Amyotrophic lateral sclerosis (ALS); Epithelial cell signaling in Helicobacter pylori

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	infection; Fc epsilon RI signaling pathway; GnRH signaling pathway; Leukocyte transendothelial migration; MAPK signaling pathway; Neurotrophin signaling pathway; RIG-I-like receptor signaling pathway; T cell receptor signaling pathway; Toll-like receptor signaling pathway; VEGF signaling pathway; Signalling by NGF
Function	ATP binding; MAP kinase activity; MAP kinase kinase activity; MP kinase activity; nucleotide binding; protein binding; protein serine/threonine kinase activity; protein serine/threonine kinase activity; transferase activity

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