

p38-gamma (non activated)

Mitogen-activated protein kinase 12

Recombinant Human non activated Protein Kinase

HGNC Symbol: MAPK12

Synonyms: ERK3, ERK6, ERK-6, PRKM12, SAPK3

Product No.: 0958-0000-2

Lot: 003

Description: Human p38-gamma, full length, amino acids M₁-L₃₆₇ (as in NCBI/Protein entry NP_002960.2), non activated, N-terminal GST-fusion protein with a 3C cleavage site, expressed in E.coli

Theoretical MW_{Protein}: 68,764 Da

Expression: E. coli

Activation: No special measures were taken to activate p38-gamma Lot 003

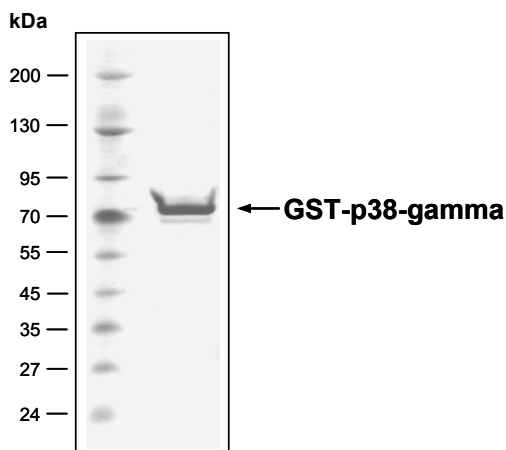
Purification: GST-Affinity Chromatography

Storage buffer: 50 mM HEPES pH 7.5, 100 mM NaCl, 5 mM DTT, 20% glycerol

Storage temperature: -80°C
Avoid repeated freeze-thaw cycles!

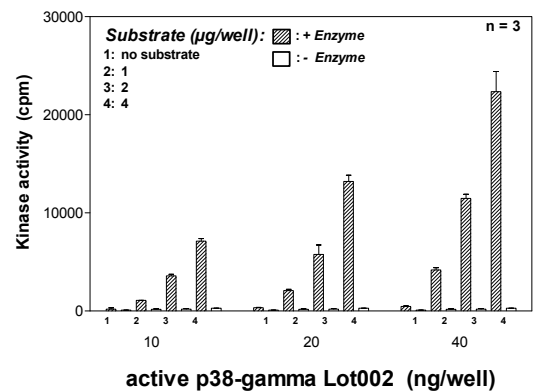
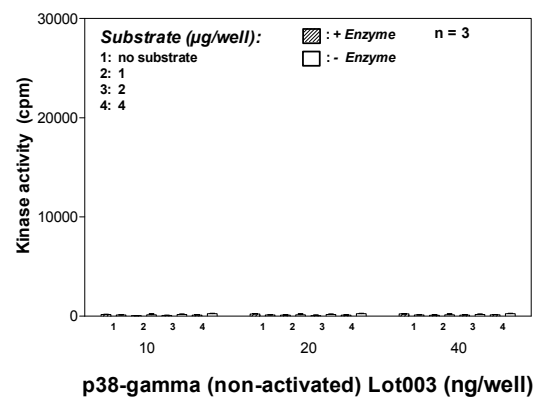
Protein concentration: 0.253 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

p38-gamma Lot 003:
Coomassie stain



2.0 µg GST-p38-gamma

Kinase activity p38-gamma (non activated) vs active p38-gamma:



Final assay concentrations:

- 60 mM HEPES-NaOH, pH 7.5
- 3 mM MgCl₂
- 3 mM MnCl₂
- 3 µM Na-orthovanadate
- 1.2 mM DTT
- 50 µg / ml PEG_{20,000}
- 1 µM ATP (610,000 cpm ³³P-γ-ATP)
- Substrate (variable): ATF2
- Recombinant p38-gamma (non activated) or active p38-gamma (variable)

Assay: ³³PanQinase[®] Assay

p38-gamma (non activated)

Product No.: 0958-0000-1

p38-gamma Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSM	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPOID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	LEVLFGPLG	SMSSPPPARS	240
241	GFYRQEVTKT	AWEVRVYRD	LQVPGSGAYG	AVCSAVDGRT	GAKVAIKKLY	RPFQSELEFAK	300
301	RAYRELRLK	HMRHENVIGL	LDVFTPDETL	DDFTDFYLVM	PFMGTDLGKL	MKHEKLGEDR	360
361	IQFLVYQMLK	GLRYIHAAGI	IHRDLKPGNL	AVNEDCELKI	LDLGLARQAD	SEMTGYVVTR	420
421	WYRAPEVILN	WMRYTQTVDI	WSVGCIMAEM	ITGKTLFKGS	DHLDQLKEIM	KVTGTPPAEF	480
481	VQLQSDEAK	NYMKGLPELE	KKDFASILT	ASPLAVNLLE	KMLVLDAEQR	VTAGEALAHF	540
541	YFESLHDTED	EPQVQYDSD	FDDVDRTLDE	WKRVTYKEVL	SFKPPRQLGA	RVSKETPL	600

1-218: GST Green: 3C blue: p38-gamma

p38-gamma wt ¹ amino acid sequence							
1	MSSPPPARSG	FYRQEVTKTA	WEVRVYRDL	QVPGSGAYGA	VCSAVDGRTG	AKVAIKKLYR	60
61	PFQSELEFAK	AYRELRLK	MRHENVIGLL	DVFTPDETL	DFTDFYLVMP	FMGTDLGKLM	120
121	KHEKLGEDRI	QFLVYQMLKG	LRHYIHAAGII	HRDLKPGNLA	VNEDCELKIL	DFGLARQADS	180
181	EMTGYVVTRW	YRAPEVILNW	MRYTQTVDI	SVGCIMAEMI	TGKTLFKGSD	HLDQLKEIMK	240
241	VTGTPPAEFV	QRLQSDEAKN	YMKGLPELEK	KDFASILTNA	SPLAVNLLEK	MLVLDAEQRV	300
301	TAGEALAHFY	FESLHDTETE	PQVQYDSDS	DDVDRTLDEW	KRVTYKEVLS	FKPPRQLGAR	360
361	VSKETPL						420

blue: p38-gamma sequence expressed in fusionprotein

¹NCBI/Protein accession number NP_002960.2