

## ProQinase™ 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 M<sub>1</sub>-L<sub>367</sub> (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<sub>Protein</sub>:** 68,764 Da

**Expression:** E. coli

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

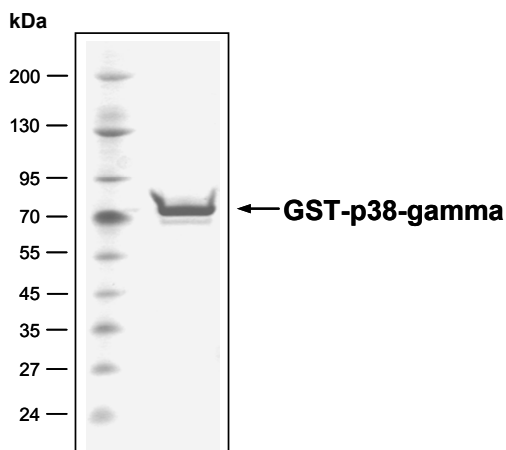
**Purification:** GST-Affinity Chromatography

**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!

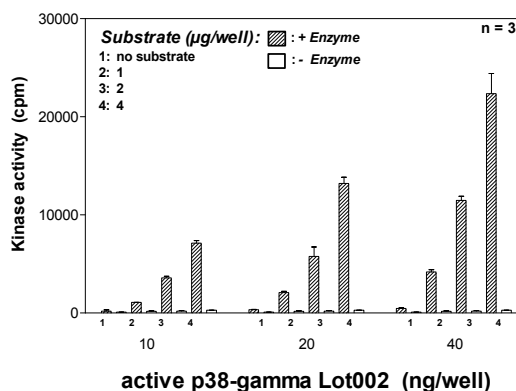
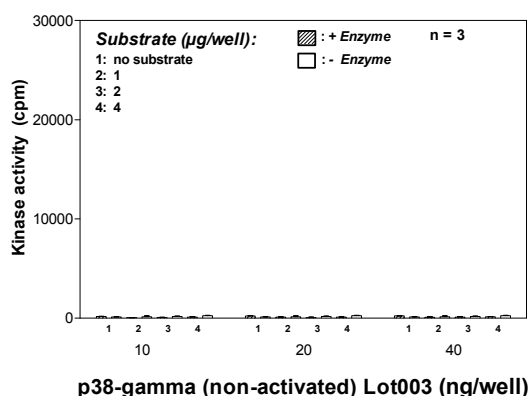
**Protein concentration:** 0.253 µg/µl  
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

**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 MgCl<sub>2</sub>
- 3 mM MnCl<sub>2</sub>
- 3 µM Na-orthovanadate
- 1.2 mM DTT
- 50 µg / ml PEG<sub>20.000</sub>
- 1 µM ATP (610,000 cpm <sup>33</sup>P-γ-ATP)
- Substrate (variable): ATF2
- Recombinant p38-gamma (non activated) or active p38-gamma (variable)

**Assay:** <sup>33</sup>PanQinase® Assay

## ProQinase™ p38-gamma (non activated)

Product No.: 0958-0000-1

p38-gamma Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRLL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLP EML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAI PQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	<b>LEVL FQG PLG</b>	<b>SMSSPPPARS</b>	240
241	<b>GFYRQEVTKT</b>	<b>AWEVRAVYRD</b>	<b>LQPVGSGAYG</b>	<b>AVCSAVDGRT</b>	<b>GAKVAIKKLY</b>	<b>RPFQSE LFAK</b>	300
301	<b>RAYRELRLLK</b>	<b>HMRHENVIGL</b>	<b>LDVFTPD ETL</b>	<b>DDFTDFYLVM</b>	<b>PFMGTDLGKL</b>	<b>MKHEKLGEDR</b>	360
361	<b>IQFLVYQMLK</b>	<b>GLRYIHAAGI</b>	<b>IHRDLKPGNL</b>	<b>AVNEDCELKI</b>	<b>LDGFLARQAD</b>	<b>SEMTGYVVTR</b>	420
421	<b>WYRAPEVILN</b>	<b>WMRYTQTVDI</b>	<b>WSVGCIMAEM</b>	<b>ITGKTLFKGS</b>	<b>DHLDQLKEIM</b>	<b>KVTGTPPAEF</b>	480
481	<b>VQRLQSDEAK</b>	<b>NYMKGLPELE</b>	<b>KKDFASILT N</b>	<b>ASPLAVN LLE</b>	<b>KMLVLDAEQ R</b>	<b>VTAGEALAH P</b>	540
541	<b>YFESLHDTED</b>	<b>EPQVQKYDDS</b>	<b>FDDVDR TLDE</b>	<b>WKRVTYKEVL</b>	<b>SFKPPRQLGA</b>	<b>RVSKETPL</b>	600

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

p38-gamma wt <sup>1</sup> amino acid sequence							
1	<b>MSSPPPARSG</b>	<b>FYRQEVTKTA</b>	<b>WEVRAVYRDL</b>	<b>QPVGSGAYGA</b>	<b>VCSAVDGRTG</b>	<b>AKVAIKKLYR</b>	60
61	<b>PFQSE LFAKR</b>	<b>AYRELRL LKH</b>	<b>MRHENVIGLL</b>	<b>DVFTPD ETL D</b>	<b>DFTDFYLVM P</b>	<b>FMGTDLGKLM</b>	120
121	<b>KHEKLGEDRI</b>	<b>QFLVYQMLKG</b>	<b>LRYIHAAGII</b>	<b>HRDLKPGNLA</b>	<b>VNEDCELKIL</b>	<b>DFGLARQADS</b>	180
181	<b>EMTGYVVTRW</b>	<b>YRAPEVILNW</b>	<b>MRYTQTVDIW</b>	<b>SVGCIMAEMI</b>	<b>TGKTLFKGSD</b>	<b>HLDQLKEIMK</b>	240
241	<b>VTGTPPAEFV</b>	<b>QRLQSDEAKN</b>	<b>YMKGLPELEK</b>	<b>KDFASILTNA</b>	<b>SPLAVN LLEK</b>	<b>MLVLDAEQRV</b>	300
301	<b>TAGEALAH PY</b>	<b>FESLHDT EDE</b>	<b>PQVQKYDDSF</b>	<b>DDVDR TLDEW</b>	<b>KRVTYKEVLS</b>	<b>FKPPRQLGAR</b>	360
361	<b>VSKETPL</b>						420

**blue:** p38-gamma sequence expressed in fusionprotein

<sup>1</sup>NCBI/Protein accession number NP\_002960.2

**Recombinant Proteins**