

ProQinase™ p38-beta (non activated)

Mitogen-activated protein kinase 11

Recombinant Human non activated Protein Kinase

HGNC Symbol: MAPK11

Synonyms: p38-2, p38b, P38B, p38Beta, P38BETA2, PRKM11, SAPK2, SAPK2B

Product No.: 0455-0000-1

Lot: 005

Description: Human p38-beta, full length, amino acids M₁-Q₃₆₄ (as in NCBI/Protein entry NP_002743.2), non activated, N-terminal HIS₆ fusion protein, expressed in E.coli

Theoretical MW_{Protein}: 44,693 Da

Expression: E. coli

Activation: No special measures were taken to activate p38-beta Lot 005

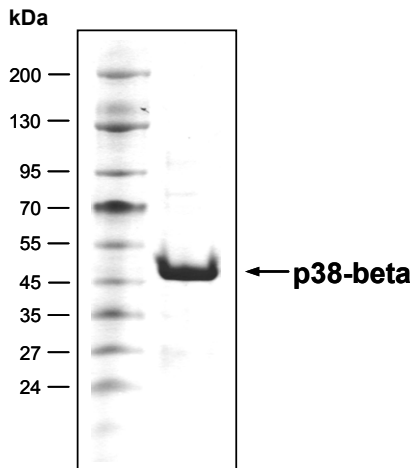
Purification: Immobilized Metal Affinity Chromatography

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!

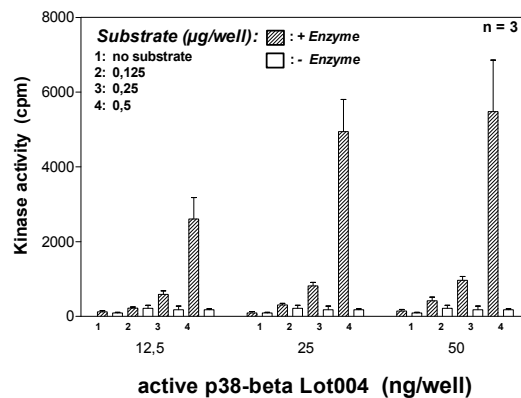
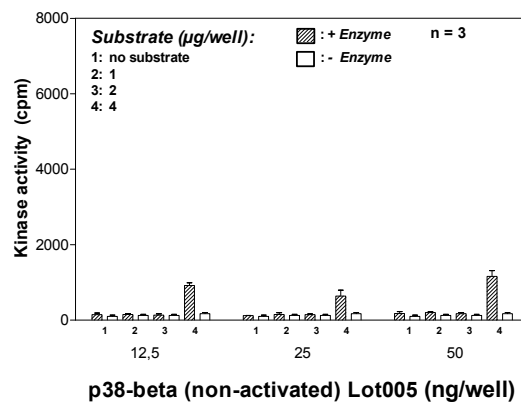
Protein concentration: 0.576 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

p38-beta Lot 005:
Coomassie stain



4.0 µg p38-beta

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



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-beta (non activated) or active p38-beta (variable)

Assay: ³³PanQinase® Assay

Recombinant Proteins

ProQinase™ p38-beta (non activated)

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p38-beta Recombinant Fusion Protein Amino Acid Sequence								
1	MHHHHH	AMT	ENLYFQGAMT	ENLYFQGAMS	GPRAGFYRQE	LNKTVWEVPQ	RLQGLRPVGS	60
61	GAYGSVCSAY	DARLRQKVAV	KKLSRPFQSL	IHARTYREL	RLKHLKHEN	VIGLLDVFTP		120
121	ATSIEDFSEV	YLVTTLMGAD	LNNIVKCQAL	SDEHVQFLVY	QLLRGLKYIH	SAGIIHRDLK		180
181	PSNAVVEDC	ELRILDFGLA	RQADEEMTGY	VATRWYRAPE	IMLNWMHYNQ	TVDIWSVSCI		240
241	MAELLQ GKAL	FPGSDYIDQL	KRIMEVVGTP	SPEVLAKISS	EHARTYIQSL	PPMPQKDLSS		300
301	IFRGANPLAI	DLLGRMLVLD	SDQRVSAAEA	LAHAYFSQYH	DPEDEPEAEP	YDESVEAKER		360
361	TLEEWKELTY	QEVLSFKPPE	PPKPPGSLEI	EQ				420

Red: HIS6-tag Green: TEV blue: p38-beta

p38-beta wt ¹ amino acid sequence							
1	MSGPRAGFYR	QELNKTWVEV	PQRLQGLRPV	GSGAYGSVCS	AYDARLRQKV	AVKKLSRPFQ	60
61	SLIHARTYR	ELRLKHLKH	ENVIGLLDVF	TPATSIEDFS	EVYLVTTLMG	ADLNNIVKCQ	120
121	ALSDEHVQFL	VYQLRGLKY	IHSAGIIHRD	LKPSNAVAVNE	DCELRILDFG	LARQADEEMT	180
181	GYVATRWYRA	PEIMLNWMHY	NQTVDIWSVG	CIMAE LLQ GK	ALFPGSDYID	QLKRIMEVVG	240
241	TPSPEVLAKI	SSEHARTYIQ	SLPPMPQKDL	SSIFRGANPL	AIDLLGRMLV	LDSDQRVSAA	300
301	EALAHAYFSQ	YHDPEDPEEA	EPYDESVEAK	ERTLEEWKEL	TYQEVLSFKP	PEPPKPPGSL	360
361	EIEQ						420

blue: p38-beta sequence expressed in fusionprotein

¹NCBI/Protein accession number NP_002743.2

Recombinant Proteins