

ProQinase™ JNK3

mitogen-activated protein kinase 10

Recombinant Human Active Protein Kinase

HGNC Symbol: MAPK10

Synonyms: FLJ12099, FLJ33785, JNK3A, p493F12, p54bSAPK, PRKM10

Product No.: 0900-0000-1

Lot: 004

Description: Human JNK3, full length, amino acids M₁-R₄₂₆ (as in [NCBI/Protein](#) entry NP_620446.1), activated, untagged, expressed in E.coli

Product identity: JNK3 Lot 004, was confirmed as JNK3 by mass spectroscopy LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 48,467 Da

Expression host: E.coli

Purification: GST-Affinity Chromatography followed by cleavage of GST-tag

Activation: with MKK7 / MEKK2

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

Storage temperature: -80°C

For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10µl are not advisable. Avoid repeated freeze-thaw cycles!

Protein concentration: 0.211 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

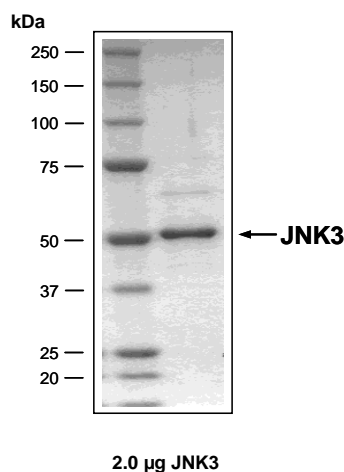
Biochemical Parameters:

Specific kinase activity (P_i transfer): 118 pmol/µg × min
ATP-K_M: 0.39 µM

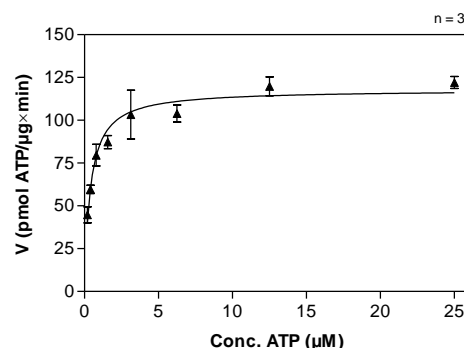
Additional assay technology:

JNK3 Lot 004 was also successfully tested by Reaction Biology for the use with the ADP-Glo™ Kinase assay from Promega ADP-Glo assay conditions may vary from radiometric assay conditions, please inquire for assay details

JNK3 Lot 004: Coomassie stain



JNK3 Lot 004: Determination of V_{max} and K_M value for ATP



Determination of K_M value & Specific activity:

- Assay conditions:
 - 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}
 - ATP (variable)
 - Substrate: rec. ATF2, 60 µg/ml
 - JNK3: 400 ng/ml
- Filter binding assay
- MSFC membrane (Millipore)

ProQinase™ JNK3

Product No.: 0900-0000-1

JNK3 Recombinant Fusion Protein Amino Acid Sequence							
1	GPLAMSKSKV	DNQFYSVEVG	DSTFTVLKRY	QNLKPIGSGA	QGIVCAAYDA	VLDRNVAIKK	60
61	LSRPFQNTQTH	AKRAYRELVL	MKCVNHKNII	SLLNVFTPOK	TLEEFQDVYL	VMELMDANLC	120
121	QVIQMELDHE	RMSYLLYQML	CGIKHLHSAG	IIHRDLKPSN	IVVKSDCITK	ILDFGLARTA	180
181	GTSFMTPYV	VTRYRAPEV	ILGMGYKENV	DIWSVGCIMG	EMVRHKILFP	GRDYIDQWNK	240
241	VIEQLGTPCP	EFMKKLQPTV	RNYVENRPKY	AGLTFPKLFP	DSLFPADSEH	NKLKASQARD	300
301	LLSKMLVIDP	AKRISVDDAL	QHPYINVWYD	PAEVEAPPPQ	IYDKQLDERE	HTIEEWKELI	360
361	YKEVMNSEEK	TKNGVVKQQP	SPSGAAVNSS	ESLPPSSSVN	DISSMSTDQT	LASDTSLSLE	420
421	ASAGPLGCCR						480

1-4: legacy of 3C cleavage **blue**: JNK3

JNK3 wt ¹ Amino Acid Sequence							
1	MSKSKVDNQF	YSVEVGDSVF	TVLKRYQNLK	PIGSGAQGIV	CAAYDAVLDL	NVAIKKLSRP	60
61	FQNQTHAKRA	YRELVLKCV	NHKNIIISLLN	VFTPQKTEE	FQDVYLVDEL	MDANLCQVIQ	120
121	MELDHERMSY	LLYQMLCGIK	HLHSAGIIHR	DLKPSNIVVK	SDCTLKILDF	GLARTAGTSF	180
181	MTPYVVTRY	YRAPEVILGM	GYKENVDIWS	VGCIMGEMVR	HKILFPGRDY	IDQWNKVIEQ	240
241	LGTCPPEFMK	KLQPTVRNYV	ENRPKYAGLT	FPKLFPDSL	PADSEHNKLN	ASQARDLLSK	300
301	MLVIDPAKRI	SVDDALQHPY	INVWYDPAEV	EAPPPQIYDK	QLDEREHTIE	EWKELIYKEV	360
361	MNSEKTKNG	VVKGQPPSPG	AAVNSSESLP	PSSSVNDISS	MSTDQTLASD	TDSLSLEASAG	420
421	PLGCCR						480

blue: JNK3 sequence expressed in recombinant protein

¹[NCBI/Protein](#) accession number NP_620446.1