

SNK

polo like kinase 2

Recombinant Human Active Protein Kinase

HGNC Symbol: PLK2

Synonyms: n/a

Product No.: 0277-0000-1

Lot: 008

Description: Human SNK, full length, amino acids M₁-N₆₈₅ (as in [NCBI/Protein](#) entry NP_006613.2), N-terminal GST-HIS₆ fusion protein with a Thrombin cleavage site, expressed in Sf9 insect cells

Product identity: SNK Lot 008, was confirmed as SNK by mass spectroscopy LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 107,562 Da

Expression host: Sf9 insect cells

Purification: GST-Affinity Chromatography

Activation: This kinase was not activated by special procedures

Storage buffer: 50 mM TRIS-HCl pH 8.0, 100 mM NaCl, 5 mM DTT, 10 mM reduced glutathione, 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: 0.086 µg/µl

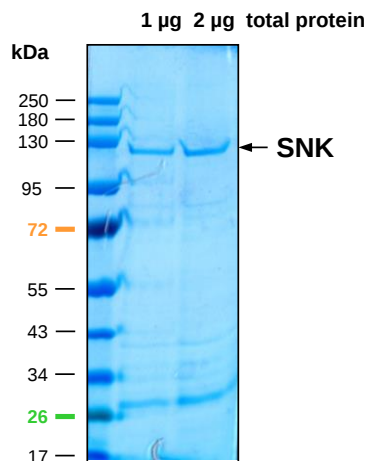
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Biochemical Parameters:

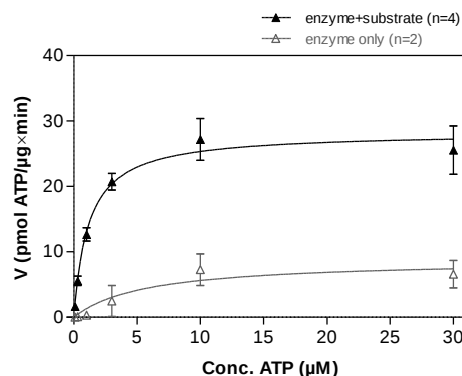
Specific kinase activity (P_i transfer): 28 pmol/µg × min

ATP-K_M: 1.2 µM

SNK Lot 008: Coomassie stain



SNK Lot 008: Determination of V_{max} and K_M value for ATP



- 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: CDC25C-derived peptide 20 µg/ml
Kinase: 1 µg/ml
- Filter binding assay
MSIP membrane (Millipore)

Additional assay technology:

SNK Lot 008 was also successfully tested by ProQinase 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

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GST-SNK Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRLL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHG	RRRASVAAGI	240
241	LVPRGSPGLD	GICSSMELLR	TITYQPAAST	KMCEQALGKG	CGADSKKKRP	QPPPEESQPP	300
301	QSQAQVPPAA	PHHHHHHS	GPEISRIIVD	PTTGKRYCRG	KVLGKGFFAK	CYEMTDLTNN	360
361	KVYAANKIIPH	SRVAKPHQRE	KIDKEIELHR	ILHHKHVVQF	YHYFEDKENI	YILLEYCSRR	420
421	SMAHILKARK	VLTEPEVRY	LRQIVSGLKY	LHEQEILHRD	LKLGNTFFINE	AMELVGDFG	480
481	LAARLEPLEH	RRRTICGTPN	YLSPEVLNKQ	GHGCESDIWA	LGCVMYTMLL	GRPPFETTNL	540
541	KETYRCIREA	RYTMPSSLLA	PAKHLIASML	SKNPEDRPSL	DDIIRHDFFL	QGFTPDRLSS	600
601	SCCHTVPDFH	LSSPAKNFFK	KAAAALFGGK	KDKARYIDTH	NRVSKEDEDI	YKLRHDLKKT	660
661	SITQPSKHR	TDEELQPPPT	TVARSGTPAV	ENKQIGDAI	RMIVRGTLGS	CSSSCELED	720
721	STMGSVADTV	ARVLRGCLEN	MPEADCIPE	QLTSFQWVT	KWVDYSNKYG	FGYQLSDHTV	780
781	GVLFNNGAAM	SLLPDKKTVH	YYAELGQCSV	FPATDAPEQF	ISQVTVLKYF	SHYMEENLMD	840
841	GGDLPSVTDI	RRPRYLLQW	LKSDKALMML	FNDGTFQVNF	YHDHTKIIC	SQNEEYLLTY	900
901	INEDRISTTF	RLTLLMSGC	SSELKNRMEY	ALNMLLQRCN			960

1-218: GST Red: HIS6-tag Pink: Thrombin cleavage site blue: SNK

SNK wt ¹ Amino Acid Sequence							
1	MELLRTITYQ	PAASTKMCEQ	ALGKGCGADS	KKKRPPQPPE	ESQPPQSQAQ	VPPAAPHHHH	60
61	HHSHSGPEIS	RRIIVDPTTGK	RYCRGKVLGK	GGFAKCYEMT	DLTNNKVYAA	KIIPHSRVAK	120
121	PHQREKIDKE	IELHRILHHK	HVVQFYHYFE	DKENIYILLE	YCSRRSMAHI	LKARKVLTEP	180
181	EVRYYLRLQIV	SGLKYLHEQE	ILHRDLKLG	FFINEAMELK	VGDFGLAARL	EPLEHRRRTI	240
241	CGTPNYLSPE	VLNKQGHGCE	SDIHALGCV	YTMLLGRPPF	ETTNLKETYR	CIREARYTMP	300
301	SLLAPAKHL	IASMLSKNPE	DRPSLDDIIR	HDFFLQGF	DRLSSSCCHT	VPDFHLSSPA	360
361	KNFFFKAAAA	LFGGKKDKAR	YIDTHNRVSK	EDEDIYKLRL	DLKKTSTITQ	PSKHRTDEEL	420
421	QPPTTTVAR	GTPAVENKQ	IGDAIRMIVR	GTLGSCSSSS	ECLEDSTMGS	VADTVARVLR	480
481	GCLNMPEAD	CIPKEQLSTS	FQWVTKWVDY	SNKYGFYQL	SDHTVGVLFN	NGAHMSLLPD	540
541	KKTVHYAEL	GQCSVFPATD	APEQFISQVT	VLKYFSHYME	ENLMDGGDLP	SVTDIRRPRL	600
601	YLLQWLKSDK	ALMMLFNDGT	FQVNFYHDHT	KIIICSQNEE	YLLTYINEDR	ISTTFRLLTTL	660
661	LMSGCSSELK	NRMEYALNML	LQRCN				720

blue: SNK sequence expressed in recombinant protein

¹[NCBI/Protein](https://www.ncbi.nlm.nih.gov/Protein) accession number NP_006613.2