

ProQinase™ SBK1

SH3 domain binding kinase 1

Recombinant Human Active Protein Kinase

HGNC Symbol: SBK1

Synonyms: Sbk

Product No.: 2119-0000-1

Lot: 001

Description: Human SBK1, full length, amino acids M₁-V₄₂₄ (as in [NCBI/Protein](#) entry NP_001019572.1), N-terminal GST-HIS₆ fusion protein with a 3C cleavage site, expressed in Sf9 insect cells

Product identity: SBK1 Lot 001, has been verified by mass spectrometry LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 74341 Da

Expression host: Sf9 insect cells

Purification: GST-Affinity Chromatography

Activation: This kinase was not activated by special procedures

Storage buffer: 50 mM HEPES pH 7.5, 100 mM NaCl, 5 mM DTT, 15 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 10 µl are not advisable. Avoid repeated freeze-thaw cycles!

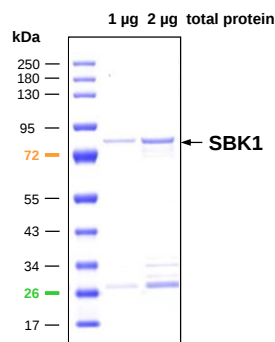
Protein concentration: 0.281 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Biochemical Parameters:

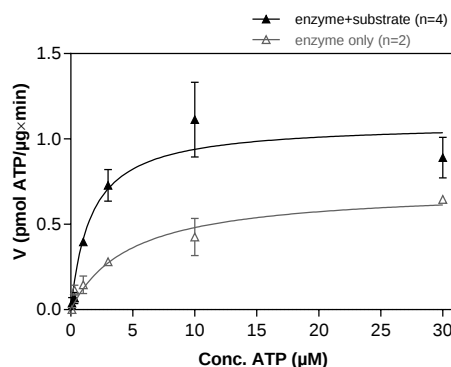
Specific kinase activity (P_i transfer): 1.1 pmol/µg*min

ATP-K_M: 1.6 µM

SBK1 Lot 001: Coomassie stain



SBK1 Lot 001: 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: RBER-CBKtide 80 µg/ml
 - Kinase: 4 µg/ml

Assay technology:
Radiometric filter binding assay
MSFC membrane (96 well plate, Millipore)

Sequence information

GST-SBK1 Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRLL	LEYLEEKYEE	HLIERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPEML	KMFKDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPIQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHHG	RDSLEVLFGG	240
241	MSVGCPEPE	PPRSLTCCGP	GTAPGPGAGV	PLLTEDMQAL	TLRTLAASDV	TKHYELVREL	300
301	GKGTYGKVDL	VVYKGTGTKM	ALKFVNKSKT	KLKNFLREVS	ITNSLSSSPF	IIKVFVDVFE	360
361	TEDCYVFAQE	YAPAGDLFDI	IPPQVGLPED	TVKRCVQQLG	LALDFMHGRQ	LVHRDIKPEN	420
421	VLLFDRECR	VKLADFGMTR	RVGCRVKRVS	GTIPYTAPEV	CQAGRADGLA	VDTGVDVWAF	480
481	GVLIFCVLTG	NFPWEAASGA	DAFFEEFVRW	QRRLPGLPS	QWRRFTEPAL	RMFQRLLEAL	540
541	PERRGPAKEV	FRFLKHELT	ELRRRPSHRA	RKPPGDRPPA	AGPLRLEAPG	PLKRTVLTES	600
601	SGSRPAPPA	VGSVPLPVPV	PVPVPVPVPV	PEPGLAPQGP	PGRTDGRADK	SKGQVVLATA	660
661	IEICV						720

1-218: GST Red: HIS6-tag Green: 3C cleavage site blue: SBK1

SBK1 wt ¹ Amino Acid Sequence							
1	MSVGCPEPEP	PRSLTCCGPG	TAPGPGAGVP	LLTEDMQALT	LRTLAASDVT	KHYELVRELG	60
61	KGTYGKVDLV	VYKGTGTKMA	LKFVNKSKTK	LKNFLREVSI	TNSLSSSPFI	IKVFVDVVFET	120
121	EDCYVFAQEY	APAGDLFDII	PPQVGLPEDT	VKRCVQQLGL	ALDFMHGRQL	VHRDIKPENV	180
181	LLFDRECRRV	KLADFGMTRR	VGCRVKRVSG	TIPYTAPEVC	QAGRADGLAV	DTGVDVWAFG	240
241	VLIFCVLTGN	FPWEAASGAD	AFEEFVRWQ	RGRLPGLPSQ	WRRFTEPALR	MFQRLLEALP	300
301	ERRGPAKEVF	RFLKHELTSE	LRRRPSHRAR	KPPGDRPPAA	GPLRLEAPGP	LKRTVLTESG	360
361	SGSRPAPPAV	GSVPLPVPVP	VPVPVPVPVP	EPGLAPQGPP	GRTDGRADKS	KGQVVLATAI	420
421	EICV						480

blue: SBK1 sequence expressed in recombinant protein

¹[NCBI/Protein](https://www.ncbi.nlm.nih.gov/protein/NP_001019572.1) accession number NP_001019572.1