

ProQinase™ SRPK1

SRSF protein kinase 1

Recombinant Human Active Protein Kinase

HGNC Symbol: SRPK1

Synonyms: SFRSK1

Product No.: 0434-0000-1

Lot: 001

Description: Human SRPK1, full length, amino acids M₁-S₆₅₅ (as in [NCBI/Protein](#) entry NP_003128.3), N-terminal GST-HIS₆ fusion protein with a Thrombin cleavage site, expressed in Sf9 insect cells

Product identity: SRPK1 Lot 001, was confirmed as SRPK1 by mass spectroscopy LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 104,220 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, 4 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: 0.250 µg/µl

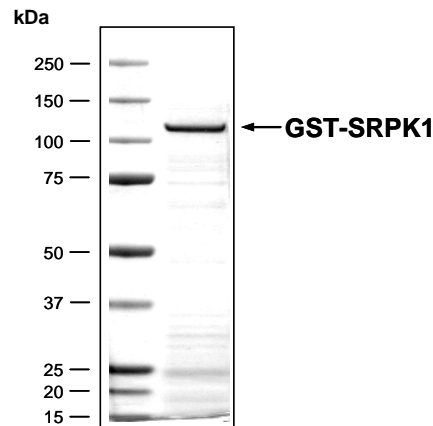
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Biochemical Parameters:

Specific kinase activity (P_i transfer): 91 pmol/µg × min

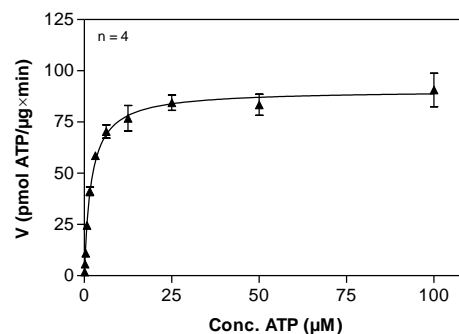
ATP-K_M: 2 µM

**SRPK1 Lot 001:
Coomassie stain**



2.0 µg GST-SRPK1

**SRPK1 Lot 001:
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: RS-peptide, 40 µg/ml
 - Kinase: 4 µg/ml
- Filter binding assay
 - MSPH membrane (Millipore)

Additional assay technology:

SRPK1 Lot 001 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

ProQinase™ SRPK1

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GST-SRPK1 Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDKVLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPOID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHG	RRRASVAAGI	240
241	LVPKPSGLD	GIYARGIQAS	MERKVLALQA	RKKRTKAKKD	KAQRKSETQH	RGSAPHSESD	300
301	LPEQEEIILG	SDDDEQEDPN	DYCKGGYHLV	KIGDLFNGRY	HVIRKLGWGH	FSTVWLSWDI	360
361	QGKFFVAMKV	VKSAEHYTET	ALDEIRLLKS	VRNSDPNDPN	REMVVQLLDD	FKISGVNGTH	420
421	ICMVFEVLGH	HLLKWIISN	YQGLPLPCVK	KIIQQVLQGL	DYLHTKCRII	HTDIKPENIL	480
481	LSVNEQYIRR	LAAEATEWQR	SGAPPPSGSA	VSTAPQPKPA	DKMSKNKKKK	LKKKQKRQAE	540
541	LLEKRMQEIE	EMEKESGPGQ	KRPNKQEES	SPVERPLKEN	PPNKMTQEKL	EESSTIGDQD	600
601	TLMERDTEGG	AAEINCNGVI	EVINYTONSN	NETLRHKEDL	HNANDCDVQN	LNQESSFLSS	660
661	QNGDSSTSQE	TDSCTPITSE	VSDTMVCQSS	STVGQSFSEQ	HISQLQESIR	AEIPCEDEQE	720
721	QEHNGPLDNK	GKSTAGNFLV	NPLEPKNAEK	LKVKIADLGN	ACWVHKHFTE	DIQTRQYRSL	780
781	EVLIGSGYNT	PADIWSTACM	AFELATGDYL	FEPHSGEYET	RDEDHIALII	ELLGKVPKRL	840
841	IVAGKYSKEF	FTKKGDLKHI	TKLKPWGLFE	VLVEKEYEWSQ	EAAAGFTDFL	LPMLELIPEK	900
901	RATAAECLRH	PWLNS					1060

1-218: GST Red: HIS6-tag Pink: Thrombin cleavage site blue: SRPK1

SRPK1 wt ¹ Amino Acid Sequence							
1	MERKVLALQA	RKKRTKAKKD	KAQRKSETQH	RGSAPHSESD	LPEQEEIILG	SDDDEQEDPN	60
61	DYCKGGYHLV	KIGDLFNGRY	HVIRKLGWGH	FSTVWLSWDI	QGKFFVAMKV	VKSAEHYTET	120
121	ALDEIRLLKS	VRNSDPNDPN	REMVVQLLDD	FKISGVNGTH	ICMVFEVLGH	HLLKWIISN	180
181	YQGLPLPCVK	KIIQQVLQGL	DYLHTKCRII	HTDIKPENIL	LSVNEQYIRR	LAAEATEWQR	240
241	SGAPPPSGSA	VSTAPQPKPA	DKMSKNKKKK	LKKKQKRQAE	LLEKRMQEIE	EMEKESGPGQ	300
301	KRPNKQEES	SPVERPLKEN	PPNKMTQEKL	EESSTIGDQD	TLMERDTEGG	AAEINCNGVI	360
361	EVINYTONSN	NETLRHKEDL	HNANDCDVQN	LNQESSFLSS	QNGDSSTSQE	TDSCTPITSE	420
421	VSDTMVCQSS	STVGQSFSEQ	HISQLQESIR	AEIPCEDEQE	QEHNGPLDNK	GKSTAGNFLV	480
481	NPLEPKNAEK	LKVKIADLGN	ACWVHKHFTE	DIQTRQYRSL	EVLIGSGYNT	PADIWSTACM	540
541	AFELATGDYL	FEPHSGEYET	RDEDHIALII	ELLGKVPKRL	IVAGKYSKEF	FTKKGDLKHI	600
601	TKLKPWGLFE	VLVEKEYEWSQ	EAAAGFTDFL	LPMLELIPEK	RATAAECLRH	PWLNS	660

blue: SRPK1 sequence expressed in recombinant protein

¹[NCBI/Protein](#) accession number NP_003128.3