

## ProQinase™ SRPK2

SRSF protein kinase 2

Recombinant Human Active Protein Kinase

HGNC Symbol: SRPK2

Synonyms: SFRSK2; FLJ36101

Product No.: 0381-0000-1

Lot: 001

**Description:** Human SRPK2, full length, amino acids M<sub>1</sub>-S<sub>688</sub> (as in [NCBI/Protein](#) entry NP\_872634.1), N-terminal GST-HIS<sub>6</sub> fusion protein with a Thrombin cleavage site, expressed in Sf9 insect cells

**Product identity:** SRPK2, Lot 001, was confirmed as SRPK2 by specific Western Blotting

**Theoretical MW**<sub>Fusion Protein</sub>: 107,422 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:** 0.330 µg/µl  
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

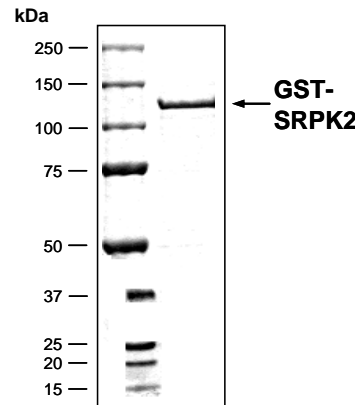
### Biochemical Parameters:

Specific kinase activity (P<sub>i</sub> transfer): 52 pmol/µg × min  
ATP-K<sub>M</sub>: 0.5 µM

### Additional assay technology:

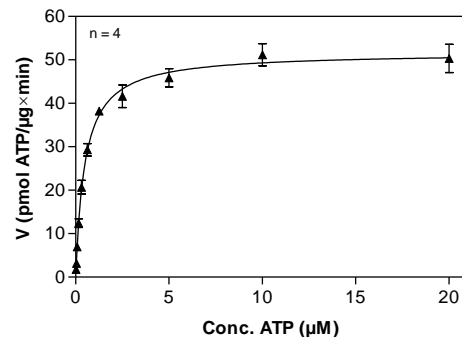
SRPK2 Lot 001 was also successfully tested by Reaction Biology for the use with the ADP-Glo™ Kinase assay from Promega ADP-Glo assay conditions may vary from radiometric assay conditions, please inquire for assay details

### SRPK2 Lot 001: Coomassie stain



2.0 µg GST-SRPK2

### SRPK2 Lot 001: Determination of V<sub>max</sub> and K<sub>M</sub> value for ATP



### Determination of K<sub>M</sub> value & Specific activity:

- Assay conditions:
  - 60 mM HEPES-NaOH, pH 7.5
  - 3 mM MgCl<sub>2</sub>
  - 3 mM MnCl<sub>2</sub>
  - 3 µM Na-orthovanadate
  - 1.2 mM DTT
  - 50 µg/ml PEG<sub>20,000</sub>
  - ATP (variable)
  - Substrate: RS-peptide (RSRSRSRSRSR), 40 µg/ml
  - Kinase: 1 µg/ml
- Filter binding assay
  - MSPH membrane (Millipore)

## ProQinase™ SRPK2

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| GST-SRPK2 Recombinant Fusion Protein Amino Acid Sequence |             |             |            |            |             |             |     |
|--|-------------|-------------|------------|------------|-------------|-------------|-----|
| 1  | MSPILGYWKI  | KGLVQPTRLL  | LEYLEEKYEE | HLYERDEGDK | WRNKKFELGL  | EFPNLPPYYID | 60  |
| 61   | GDVKLTQSMA  | IIRYIADKHN  | MLGGCPKERA | EISMLEGAVL | DIRYGVSRIA  | YSKDFETLKV  | 120 |
| 121  | DFLSKLPPEML | KMFEDRLCHK  | TYLNGDHVTH | PDFMLYDALD | VVLYMDPMCL  | DAFPKLVCFK  | 180 |
| 181  | KRIEAIPOID  | KYLKSSKYIA  | WPLQGWAQTF | GGGDHPPKSD | PMGHHHHHG   | RRRASVAAGI  | 240 |
| 241  | LVPRGSPGLD  | GIYARGIQAS  | MSVNSEKSSS | SERPEPQOKA | PLVPPPPPPP  | PPPPPLPDP   | 300 |
| 301  | TPPEPEEEIL  | GSDDEEQEDP  | ADYCKGGYHP | VKIGDLFNGR | YHVIRKLGWG  | HFSTVWLCWD  | 360 |
| 361  | MQGKRFVAMK  | VVKSQAQHYTE | TALDEIKLLK | CVRESPPSDP | NKDMVVQLID  | DFKISGMNGI  | 420 |
| 421  | HVCMVFEVLG  | HLLKWI IKS  | NYQGLPVRCV | KSIIRQVLQG | LDYLHCKCKI  | IHTDIKPENI  | 480 |
| 481  | LMCVDDAYVR  | RMAAEATEWQ  | KAGAPPPSGS | AVSTAPQOKP | IGKISKNNKK  | KLKKKQKRQA  | 540 |
| 541  | ELLEKRLQEI  | EELEREAEERK | IIEENITSAA | PSNDQDGEYC | PEVKLKTGTL  | EEAAEAETAK  | 600 |
| 601  | DNGEADQEE   | KEDAEKENIE  | KDEDDVDQEL | ANIDPTWIES | PKTNNGHIENG | PFSLEQQLDD  | 660 |
| 661  | EDDDEEDCPN  | PEEYNLDEPN  | AESDYTYSSS | YEQFNGELPN | GRHKIPESQF  | PEFSTSLFSG  | 720 |
| 721  | SLEPVACGSV  | LSEGSPLTEQ  | EESSPSHRS  | RTVSASSTGD | LPAKTRAAD   | LLVNPLDPRN  | 780 |
| 781  | ADKIRVKIAD  | LGNACWVHKH  | FTEDIQTRQY | RSIEVLIGAG | YSTPADIWST  | ACMAFELATG  | 840 |
| 841  | DYLFEPHSGE  | DYSRDEDHIA  | HIIELLSIP  | RHFALSGKYS | REFFNRRGEL  | RHITKLPWS   | 900 |
| 901  | LFDVLVEKYG  | WPHEAAQFT   | DFLIPMLEMV | PEKRASAGEC | LRHPWLNS    |             | 960 |

1-218: GST Red: HIS6-tag Pink: Thrombin cleavage site blue: SRPK2

| SRPK2 wt <sup>1</sup> Amino Acid Sequence |            |            |             |            |            |             |     |
|---|------------|------------|-------------|------------|------------|-------------|-----|
| 1   | MSVNSEKSSS | SERPEPQOKA | PLVPPPPPPP  | PPPPPLPDP  | TPPEPEEEIL | GSDDEEQEDP  | 60  |
| 61  | ADYCKGGYHP | VKIGDLFNGR | YHVIRKLGWG  | HFSTVWLCWD | MQGKRFVAMK | VVKSQAQHYTE | 120 |
| 121                                       | TALDEIKLLK | CVRESPPSDP | NKDMVVQLID  | DFKISGMNGI | HVCMVFEVLG | HLLKWI IKS  | 180 |
| 181                                       | NYQGLPVRCV | KSIIRQVLQG | LDYLHCKCKI  | IHTDIKPENI | LMCVDDAYVR | RMAAEATEWQ  | 240 |
| 241                                       | KAGAPPPSGS | AVSTAPQOKP | IGKISKNNKK  | KLKKKQKRQA | ELLEKRLQEI | EELEREAEERK | 300 |
| 301                                       | IIEENITSAA | PSNDQDGEYC | PEVKLKTGTL  | EEAAEAETAK | DNGEADQEE  | KEDAEKENIE  | 360 |
| 361                                       | KDEDDVDQEL | ANIDPTWIES | PKTNNGHIENG | PFSLEQQLDD | EDDDEEDCPN | PEEYNLDEPN  | 420 |
| 421                                       | AESDYTYSSS | YEQFNGELPN | GRHKIPESQF  | PEFSTSLFSG | SLEPVACGSV | LSEGSPLTEQ  | 480 |
| 481                                       | EESSPSHRS  | RTVSASSTGD | LPAKTRAAD   | LLVNPLDPRN | ADKIRVKIAD | LGNACWVHKH  | 540 |
| 541                                       | FTEDIQTRQY | RSIEVLIGAG | YSTPADIWST  | ACMAFELATG | DYLFEPHSGE | DYSRDEDHIA  | 600 |
| 601                                       | HIIELLSIP  | RHFALSGKYS | REFFNRRGEL  | RHITKLPWS  | LFDVLVEKYG | WPHEAAQFT   | 660 |
| 661                                       | DFLIPMLEMV | PEKRASAGEC | LRHPWLNS    |            |            |             | 720 |

blue: SRPK2 sequence expressed in recombinant protein

<sup>1</sup>[NCBI/Protein](https://www.ncbi.nlm.nih.gov/nuccore/NP_872634.1) accession number NP\_872634.1