

ProQinase™ SRC (HIS-tag)

SRC proto-oncogene, non-receptor tyrosine kinase

Recombinant Human Active Protein Kinase

HGNC Symbol: SRC

Synonyms: ASV; SRC1, c-src

Product No.: 0260-0000-1

Lot: 009

Description: Human SRC, full length, amino acids M₁-L₅₃₆ (as in [NCBI/Protein](#) entry NP_005408.1), G2A mutated. N-terminal HIS₆ fusion protein with a Thrombin/ cleavage site, expressed in Sf9 insect cells

Product identity: SRC (HIS-tag) Lot 009 was confirmed as SRC by SRC specific Western Blotting.

Theoretical MW_{Fusion Protein}: 64,605 Da

Expression host: Sf9 insect cells

Purification: Immobilized Metal 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, 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: 0.900 µg/µl

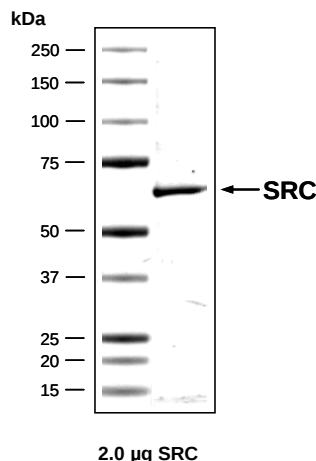
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Biochemical Parameters:

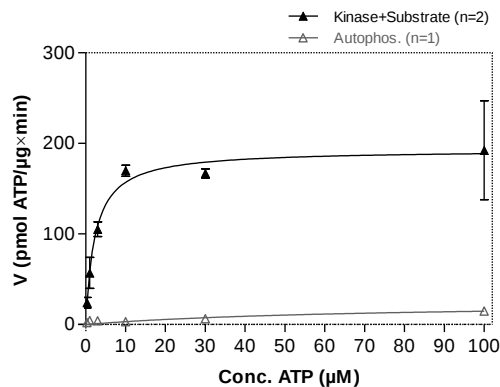
Specific kinase activity (P_i transfer): 193 pmol/µg × min

ATP-K_M: 2.3 µM

SRC Lot 009: Coomassie stain



SRC Lot 009: 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: Poly(Glu:Tyr)_{4:1} 20 µg/ml
 - Kinase: 0.4 µg/ml
- Filter binding assay
 - MSFC membrane (Millipore)

Additional assay technology:

Kinase Lot 000 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™ SRC (HIS-tag)

Product No.: 0260-0000-1

HIS-SRC Recombinant Fusion Protein Amino Acid Sequence												
1	MSPIDPMG	HHH	HHHH	GRRRAS	VAAGI	LVPRG	SPGLDGIYAR	GIQAS	M	SNK	SKPKDASQRR	60
61	RSLEPAENVH	GAGGGAFFAS	QTPSKPASAD	GHRGPSAAFA	PAAAE	PKLFG	GFNSSDTVTS					120
121	PQRAGPLAGG	VTTFVALYDY	ESRTE	TDLSF	KKGERLQIVN	NTEGDWWLAH	SLSTGQTGYI					180
181	PSNYVAPSDS	IQAEWYFGK	ITRRESERLL	LNAENPRGTF	LVRESETTKG	AYCLSVSDFD						240
241	NAKGLNVKHY	KIRKLDSSGF	YITSRTQFNS	LQQLVAYYSK	HADGLCHRLT	TVCPTSKPQT						300
301	QGLAKDAWEI	PRESLRLEVK	LGQGC	FGEVW	MGTWNGTTRV	AIKTLKPGTM	SPEAFLQEAQ					360
361	VMKKLRHEKL	VQLYAVVSEE	PIYIVTEYMS	KGSLDLFLKG	ETGKYLRLPQ	LVDMAAQIAS						420
421	GMAYVERMNY	VHRDLRAANI	LVGENLVCKV	ADFG	LARLIE	DNEYTARQGA	KFPIKWTAPE					480
481	AALYGRFTIK	SDVWSFGILL	TELT	TKGRVP	YPMGVNREVL	DQVERGYRMP	CPPEC	PESLH				540
541	DLMCQCWRKE	PEERPTFEYL	QAFLEDYFTS	TEPOYOPGEN	L							600

Red: HIS6-tag Pink: Thrombin cleavage site blue: SRC boxed: variation from RefSeq

SRC wt ¹ Amino Acid Sequence																
1	M	G	S	N	K	S	K	P	K	D	ASQRRRSLEP	AENVHGAGGG	AFPASQTPSK	PASADGHRGP	SAAFAPAAAE	60
61	P	K	L	F	G	G	F	N	S	S	DTVTSPQRAG	PLAGGVTTFFV	ALYDYESRTE	TDLSFKKGER	LQIVNNTGED	120
121	W	W	L	A	H	S	L	S	T	G	QTGYIPSNYV	APSDSIQAE	WYFGKITRRE	SERLLLNAEN	PRGTFLVRES	180
181	E	T	T	K	G	A	Y	C	L	S	VSDFDNAKGL	NVKHYKIRKL	DSGGFYITSR	TQFNSLQQLV	AYYSKHADGL	240
241	C	H	R	L	T	T	V	C	P	T	SKPQTQGLAK	DAWEIPRESL	RLEVKLQGC	FGEVWMGTWN	GTTRVAIKTL	300
301	K	P	G	T	M	S	P	E	A	F	LQEAQVMKKL	RHEKLVQLYA	VVSEPIYIV	TEYMSKGSLL	DFLKGETGKY	360
361	L	R	L	P	Q	L	V	D	M	A	AQIASGMAYV	ERMNYVHRDL	RAANILVGEN	LVCKVADFGL	ARLIEDNEYT	420
421	A	R	Q	G	A	F	P	I	K		WTAPEAALYG	RFTIKSDVWS	FGILLTELT	T	KGRVPYPGMV	480
481	G	Y	R	M	P	C	P	P	E	C	PESLHDLMCO	CWRKEPEERP	TFEYLOAFLE	DYFTSTEPQY	QPGENL	540

blue: SRC sequence expressed in recombinant protein Red: variant in recombinant protein

¹NCBI/Protein accession number NP_005408.1