

ABL2

v-abl Abelson murine leukemia viral oncogene homolog 2

Recombinant Human Active Protein Kinase

HGNC Symbol: ABL2

Synonyms: ABLL, ARG

Product No.: 1548-0000-2

Lot: 012

Description: Human ABL2, N-terminal fragment, amino acids M₁-P₆₅₀ (as in NCBI/Protein entry NP_005149.4), N-terminal GST-HIS₆ fusion protein with a 3C cleavage site, expressed in Sf9 insect cells

Product identity: ABL2 Lot 012, was confirmed as ABL2 by mass spectroscopy LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 100,398 Da

Expression host: Sf9 insect cells

Purification: GST-Affinity Chromatography

Activation: in vitro auto activation

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 10µl are not advisable. Avoid repeated freeze-thaw cycles!

Protein concentration: 0.230 µg/µl

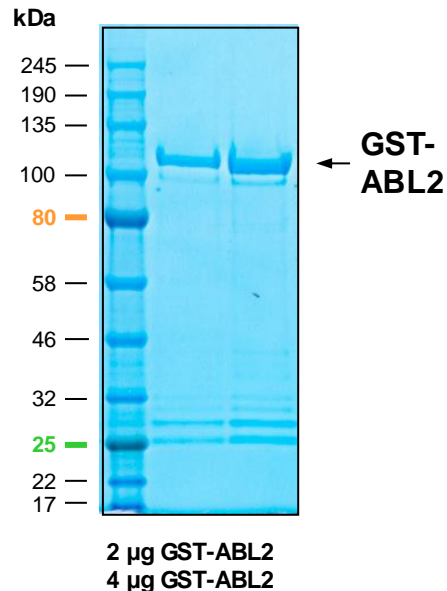
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Biochemical Parameters:

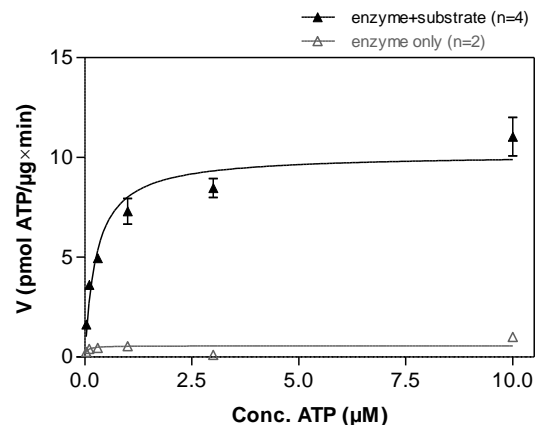
Specific kinase activity (P_i transfer): 10 pmol/µg × min

ATP-K_M: 0.3 µM

ABL2 Lot 012:
Coomassie stain



ABL2 Lot 012:
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(Ala,Glu,Lys,Tyr)_{6:2:5:1} 2.5 µg/ml
 - Kinase: 1.0 µg/ml
- Filter binding assay
 - MSFC membrane (Millipore)

ABL2

Product No.: 1548-0000-1

GST-ABL2 Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQ SMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLP EML	KMFKDR LCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAI P QID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMG HHHHHH G	RDS LEVL FQ G	240
241	PMVLGTVLLP	PNSYGRDQDT	SLCCLCTEAS	ESALPDLTDH	FASCVEDGFE	GDKTGGSSPE	300
301	ALHRPYGCDV	EPQALNEAIR	WSSKENLLGA	TESDPNLFVA	LYDFVASGDN	TL SITKGEKL	360
361	RVLGYNQNGE	WSEVRSKNGQ	GWVPSNYITP	VNSLEKHSWY	HGPVRSAAE	YLLSSLINGS	420
421	FLVRESESSP	GQLSISLRYE	GRVYHYRINT	TADGKVYVTA	ESRFSTLAEL	VHHHSTVADG	480
481	LVTTLHY PAP	KCNKPTVYGV	SPIHDKWEME	RTDITMKHKL	GGGQYGEVYV	GVWKKYSLTV	540
541	AVKTLKEDTM	EV EEF LKEAA	VMKEIKHPNL	VQLLGVCTLE	PPFYIVTEYM	PYGNLLDYL R	600
601	ECNREEVTAV	VLLYMATQIS	SAMEYLEKKN	FIHRDLAARN	CLVGENHVVK	VADFGLSRLM	660
661	TGDTYTAHAG	AKFPIKWTAP	ESLAYNTFSI	KSDVWAFGVL	LWEIATYGMS	PYPGIDLSQV	720
721	YDLLEKGYRM	EQPEGCPPKV	YELMRACWKW	SPADRPSFAE	THQAFETMFH	DSSISEEVAE	780
781	ELGRAASSSS	VVPYLPRLPI	LPSKTRTLKQ	QVENKENIEG	AQDATENSAS	SLAPGFIRGA	840
841	QASSGSPALP	RKQRDKSPSS	LLEDAKETCF	TRDRKGGFFS	SFMKKRNAPT	P	900

1-218: GST **Red**: HIS6-tag **Green**: 3C cleavage site **blue**: ABL2 fragment

ABL2 wt ¹ Amino Acid Sequence							
1	MVLGTVLLPP	NSYGRDQDTS	LCCLCTEASE	SALPDLTDHF	ASCVEDGFEG	DKTGGSSPEA	60
61	LHRPYGCDVE	PQALNEAIRW	SSKENLLGAT	ESDPNLFVAL	YDFVASGDN	LSITKGEKLR	120
121	VLGYNQNGEW	SEVRSKNGQG	WVPSNYITPV	NSLEKHSWYH	GPVRSAAEY	LLSSLINGSF	180
181	LVRESESSPG	QLSISLRYEG	RVYHYRINTT	ADGKVYVTAE	SRFSTLAELV	HHHSTVADGL	240
241	VTTTLHY PAK	CNKPTVYGV S	PIHDKWEMER	TDITMKHKL G	GGQYGEVYV G	VWKKYSLTVA	300
301	VKTLKEDTME	VEEFLKEAAV	MKEIKHPNLV	QLLGVCTLEP	PPFYIVTEYMP	YGNLLDYLRE	360
361	CNREEVTAVV	LLYMATQISS	AMEYLEKKNF	IHRDLAARNC	LVGENHVVKV	ADFGLSRLMT	420
421	GDTYTAHAGA	KFPIKWTAPE	SLAYNTFSIK	SDVWAFGVLL	WEIATYGMSP	YPGIDLSQVY	480
481	DLLEKGYRME	QPEGCPPKVY	ELMRACWKWS	PADRPSFAET	HQAFETMFHD	SSISEEVAEE	540
541	LGRAASSSSV	VPYLPRLPIL	PSKTRTLKQ	VENKENIEGA	QDATENSASS	LAPGFIRGAQ	600
601	ASSGSPALPR	KQRDKSPSSL	LEDAKETCFT	RDRKGGFFSS	FMKKRNAPT	PKRSSSFREM	660
661	ENQPHKKYEL	TGNFSSVASL	QHADGFSFTP	AQQEANLVPP	KCYGGSFAQR	NLCNDDGGGG	720
721	GGSGTAGGGW	SGITGFFTPR	LIKKTLGLRA	GKPTASDDTS	KPFPRSNTS	SMSSGLPEQD	780
781	RMAMTLPRNC	QRSKLQLERT	VSTSSQPEEN	VDRANDMLPK	KSEESAAPSR	ERP KAKLLPR	840
841	GATALPLRTP	SGDLAITEKD	PPGVGVAGVA	AAPKGKEKNG	GARLGMAGVP	EDGEQPGWPS	900
901	PAKAAPVLPT	THNHKVPVLI	SPTLKHTPAD	VQLIGTDSQG	NKFKLLSEHQ	VTSSGDKDRP	960
961	RRVKPKCAPP	PPV MRLLOH	PSICSDPTEE	PTALTAGQST	SETQEGGKKA	ALGAVPISGK	1020
1021	AGRPVMP PPQ	VPLPTSSISP	AKMANGTAGT	KVALRKTQQA	AEKISADKIS	KEALLECADL	1080
1081	LSSALTEPVP	NSQLVDTGHQ	LLDYCSGYVD	CIPQTRNKFA	FREAVSKLEL	SLQELQVSSA	1140
1141	AAGVPGTNPV	LNNLLSCVQE	ISDVVQR				1200

blue: ABL2 sequence expressed in recombinant protein

¹NCBI/Protein accession number NP_005149.4