

ABL2

ABL proto-oncogene 2, non-receptor tyrosine kinase

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

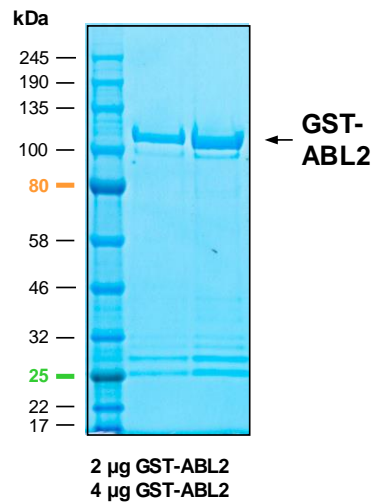
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Biochemical Parameters:

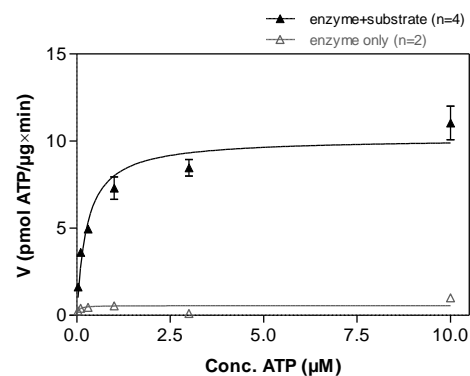
Specific kinase activity (P_i transfer): 10 pmol/µg × min

ATP-K_M: 0.3 µM

ABL2 Lot 012: Coomassie stain



ABL2 Lot 012: Determination of V_{max} and K_M value for ATP



- 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 µg/ml
- Filter binding assay
MSFC membrane (Millipore)



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GST-ABL2 Recombinant Fusion Protein Amino Acid Sequence								
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60	
61	GDVKLTQSM	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120	
121	DFLSKLP	KMFKDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180	
181	KRIEAI	QID KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHG	RDSLEVLFGQ	240	
241	PMVLGT	VLLP P	NSYGRDQDT	SLCCLCTEAS	ESALPDLTDH	FASCVEDGFE	GDKTGGSSPE	300
301	ALHRPY	GCDV EPQALNEAIR	WSSKENLLGA	TESDPNLFVA	LYDFVAGDN	TLSITKGEKL	360	
361	RVLGYN	QNGE WSEVRSKNGQ	GWVPSNYITP	VNSLEKHSWY	HGPVSRSAE	YLLSSLINGS	420	
421	FLVRESE	SSP GQLSISLRYE	GRVYHYRINT	TADGKVYVTA	ESRFSTLAE	L VHHHSTVADG	480	
481	LVTTLHY	PAP KCNKP	TVYGV SPIHDKWEME	RTDITMKHKL	GGGQYGEVYV	GVWKKYSLTV	540	
541	AVKTLK	EDTM EVVEEFLKEAA	VMKEIKHPNL	VQLLGVCTLE	PPFYIVTEYM	PYGNLLDYLR	600	
601	ECNREE	VTAV VLLYMATQIS	SAMEYLEKKN	FIHRDLAARN	CLVGENHVVK	VADFGLSRLM	660	
661	TGDTYTA	HAG AKFP	IKWTAP ESLAYNTFSI	KSDVWAFGVL	LWEIATYGMS	PYPGIDLSQV	720	
721	YDLLEK	GYRM EQPEGCPPKV	YELMRACWKW	SPADRPSFAE	THQAFETMFH	DSSISEEVAE	780	
781	ELGRAAS	SSS VVYLPRLPI	LPSKTRTLKK	QVENKENIEG	AQDATENSAS	SLAPGFIRGA	840	
841	QASSG	PALP RKQRDKSPSS	LLEDAKETCF	TRDRKGGFFS	SFMKRNAPT	P	900	

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

ABL2 wt ¹ Amino Acid Sequence									
1	MVLGTV	LPLP NSYGRDQDTS	LCCLCTEASE	SALPDLTDHF	ASCVEDGFEG	DKTGGSSPEA	60		
61	LHRPYG	CDVE PQALNEAIRW	SKENLLGAT	ESDPNLFVAL	YDFVAGDNT	LSITKGEKLR	120		
121	VLGYNQ	NGEW SEVRSKNGQG	WVPSNYITPV	NSLEKHSWYH	GPVSRSAEY	LLSSLINGSF	180		
181	LVRESE	SSPG QLSISLRYEG	RVYHYRINTT	ADGKVYVTAE	SRFSTLAEV	HHHSTVADGL	240		
241	VTTLHY	PAPK CNKP	TVYGV SPIHDKWEME	TDITMKHKL	GGQYGEVYV	VWKKYSLTVA	300		
301	VKTLK	EDTME VEEFLKEAAV	MKEIKHPNLV	QLLGVCTLEP	PPFYIVTEYMP	YGNLLDYLR	360		
361	CNREE	VTAV VLLYMATQISS	AMEYLEKKNF	IHRDLAARNC	LVGENHVVKV	ADFGLSRLMT	420		
421	GDTYTA	HAGA KFP	IKWTAPE SLAYNTFSIK	SDVWAFGVL	WEIATYGMS	PYPGIDLSQV	480		
481	DLLEK	GYRME QPEGCPPKVY	ELMRACWKWS	PADRPSFAET	HQAFETMFHD	SSISEEVAEE	540		
541	LGRAAS	SSSV VPYLPRLPIL	PSKTRTLKKQ	VENKENIEGA	QDATENSASS	LAPGFIRGAQ	600		
601	ASSG	PALPR KQRDKSPSS	LLEDAKETCF	RDRKGGFFS	FMKRNAPT	PKRSSSFREM	660		
661	ENQPH	KKYEL TGNFSSVASL	QHADGFSFTP	AQQEANLVPP	KCYGGSFAQR	NLCNDDGGGG	720		
721	GGSGT	AGGW SGITGFFTPR	LIKKTLLGLRA	GKPTASDDTS	KPFPRSNSTS	SMSSGLPEQD	780		
781	RMAMTL	PRNC QRSKLQLERT	VSTSSQPEEN	VDRANDMLPK	KSEESAAPSR	ERP	KAKLLPR	840	
841	GATALP	LRTP SGDLAITEKD	PPGVGVAGVA	AAPKGEKNG	GARLG	MAGVP	EDGEQ	PGWPS	900
901	PAKAAP	VLPT THNHKVPVLI	SPTLKHTPAD	VQLIGTDSQG	NKFKLLSEHQ	VTSSGDKDRP	960		
961	RRVKPK	CAPP PPPVMRLLOH	PSICSDPTEE	PTALTAGQST	SETQEGGKKA	ALGAVPISGK	1020		
1021	AGRPV	MPPPQ VPLPTSSISP	AKMANGTAGT	KVALRKTQA	AEKISADKIS	KEALLECADL	1080		
1081	LSSALTE	PVP NSQLVDTGHQ	LLDYCSGYVD	CIPQTRNKFA	FREAVSKLEL	SLQELQVSSA	1140		
1141	AAGVP	GTNPV LNNLLSCVQE	ISDVVQR				1200		

blue: ABL2 sequence expressed in recombinant protein

¹NCBI/Protein accession number NP_005149.4