

ABL1 H396P

v-abl Abelson murine leukemia viral oncogene homolog 1

Recombinant Human Active Protein Kinase

HGNC Symbol: ABL1

Synonyms: c-Abl, JTK7, p150

Product No.: 0991-0000-1

Lot: 001

Description: Human ABL1, internal fragment, amino acids P₁₁₈-S₅₃₅ (as in NCBI/Protein entry NP_005148.2), with a H396P point mutation, N-terminal GST-HIS₆ fusion protein with a 3C cleavage site, expressed in Sf9 insect cells

Product identity: ABL1 H396P Lot 001 was confirmed as ABL1 with mutation H396P by mass spectroscopy LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 76,127 Da Da

Expression: Baculovirus infected Sf9 cells/E.coli

Purification: GST-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, 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: 0.194 µg/µl

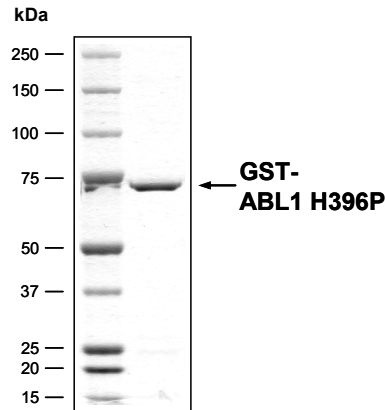
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Biochemical Parameters:

Specific kinase activity (P_i transfer): 41 pmol/µg × min

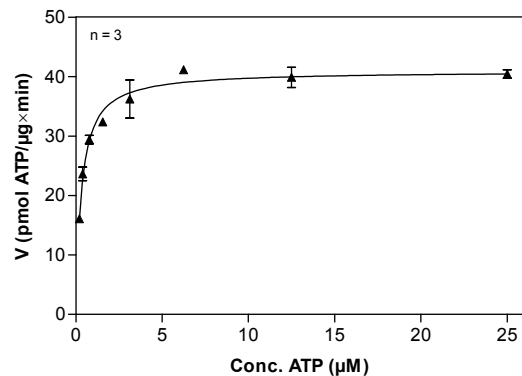
ATP-K_M: 0.3 µM

**ABL1 H396P Lot 001:
Coomassie stain**



2.0 µg GST-ABL1 H396P

**ABL1 H396P 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: Poly(Ala,Glu,Lys,Tyr)6:2:5:1 20 µg/ml
 - ABL1 H396P: 2.0 µg/ml
- Filter binding assay
 - MSFC membrane (Millipore)

Additional assay technology: ABL1 H396P Lot 001

was also successfully tested by ProQinase 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



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ABL1 H396P Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRLL	LEYLEEKYTE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSM	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPOID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMG HHHHHG	RDS LEVLFG	240
241	PLAMLVNSL	EKHSWYHGPV	SRNAEYLLS	SGINGSFLVR	ESESSPGQRS	ISLRYEGRVY	300
301	HYRINTASDG	KLYVSSESRF	NTLAELVHHH	STVADGLITT	LHYPAPKRNK	PTVYGVSPNY	360
361	DKWEMERTDI	TMKHKLGGO	YGEVYEGVWK	KYSLTVAVKT	LKEDTMEVEE	FLKEAAVMKE	420
421	IKHPNLVQLL	GVCTREPPFY	IITEFMTYGN	LLDYLRECNR	QEVNAVLLY	MATQISSAME	480
481	YLEKKNFIHR	DLAARNCLVG	ENHLVKVADF	GLSRLMTGDT	YTAHAGAKFP	IKWTAPESLA	540
541	YNKFSIKSDV	WAFGVLLWEI	ATYGMSPYPG	IDLSQVYELL	EKDYRMERPE	GCPEKVYELM	600
600	RACWQWNP	RPSFAEIHQA	FETMFQESSI	SDEVEKELGK	QGVRGAVSTL	LQAPELPTKT	660
661	RTS						720

1-218: GST **Red:** HIS6-tag **Green:** 3C cleavage site **blue:** ABL1 fragment **boxed:** H396P

ABL1 wt ¹ Amino Acid Sequence							
1	MLEICLKLVG	CKSKKGLSSS	SSCYLEEALQ	RPVASDFEPQ	GLSEAARWNS	KENLLAGPSE	60
61	NDPNLFFVALY	DFVASGDNTL	SITKGEKLRV	LGYNHNGEWC	EAQTKNGQGW	VPSNYIT PVN	120
121	SLEKHSWYHG	PVSRNAEYL	LSSGINGSFL	VRESESSPGQ	RSISLRYEGR	VYHYRINTAS	180
181	DGKLYVSSES	RFNTLAELVH	HHSTVADGLI	TTLHYPAPKR	NKPTVYGVSP	NYDKWEMERT	240
241	DITMKHKLGG	GOYGEVYEGV	WKYSLTVAV	KTLKEDTMEV	EEFLKEAAVM	KEIKHPNLVQ	300
301	LLGVCTREPP	FYIITEFMTY	GNLLDYLREC	NRQEVNAVVL	LYMATQISSA	MEYLEKKNFI	360
361	HRDLAARNCL	VGENHLVKVA	DFGLSRLMTG	DTYTAHAGAK	FPIKWTAPES	LAYNKFSIKS	420
421	DVWAFGVLLW	EIATYGMSPY	PGIDLSQVYE	LLEKDYRMER	PEGCPEKVYE	LMRACWQWNP	480
481	SDRPSFAEIH	QAFETMFQES	SISDEVEKEL	GKQGVRGAVS	TLLQAPELPT	KTRTSRRRAE	540
541	HRDTTDVP	PHSKQGQESD	PLDHEPAVSP	LLPRKERGPP	EGGLNEDERL	LPKDKKTNLF	600
600	SALIKKKKKT	APTPPKRSSS	FREMDGQPER	RGAGEEEGRD	ISNGALAFPT	LDTADPAKSP	660
661	KPSNGAGVP	GALRESGGSG	FRSPHLWKKS	STLTSSRLAT	GEEEGGGSSS	KRFLRSCSAS	720
721	CVPHGAKDTE	WRSVTLPRDL	QSTGRQFDSS	TFGGHKSEKP	ALPRKRAGEN	RSDQVTRGTV	780
781	TPPPRLVKKN	EEAADEVFKD	IMESSPGSSP	PNLTPKPLRR	QVTVPASGL	PHKEEAGKGS	840
841	ALGTPAAAEP	VTPTSKAGSG	APGGTSKGPA	EESRVRRHKH	SSESPGRDKG	KLSRLKPAPP	900
901	PPPAASAGKA	GGKPSQSPSQ	EAAGEAVLGA	KTKATSLVDA	VNSDAAKPSQ	PGEGLKKPVL	960
961	PATPKPQSAK	PSGTPISPAP	VPSTLPSASS	ALAGDQPSST	AFIPLISTRV	SLRKTRQPPE	1020
1021	RIASGAIK	VVLDSTEALC	LAISRNSQM	ASHSAVLEAG	KNLYTFCVSY	VDSIQQMRNK	1080
1081	FAFREAINKL	ENNLRELQIC	PATAGSGPAA	TQDFSKLLSS	VKEISDIVQR		1140

blue: ABL1 sequence expressed in fusion protein **Red:** variant in fusion protein

¹NCBI/Protein accession number NP_005148.2