

ProKinase™ EPHA6

EPH receptor A6

Recombinant Human Active Protein Kinase

HGNC Symbol: EPHA6

Synonyms: EHK2, EHK-2, EPA6

Product No.: 1515-0000-1

Lot: 010

Description: Human EPHA6, C-terminal fragment, amino acids R₆₈₃-V₁₁₃₀ (as in NCBI/Protein entry NP_001073917.2), N-terminal GST-HIS₆ fusion protein with a 3C cleavage site, expressed in Sf9 insect cells

Product identity: EPHA6 Lot 010, was confirmed as EPHA6 by mass spectroscopy LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 78,636 Da

Expression: Baculovirus infected Sf9 cells

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

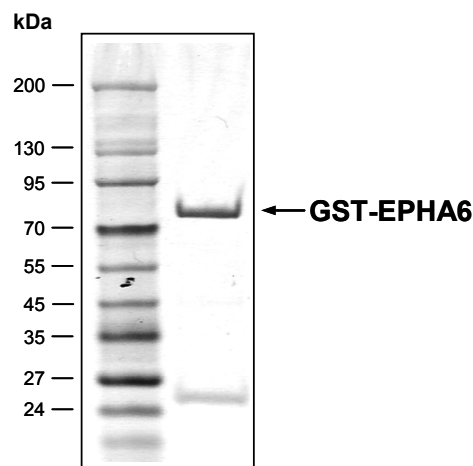
For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10µl are not advisable. Avoid repeated freeze-thaw cycles!

Protein concentration: 0.144 µg/µl (Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Biochemical Parameters:

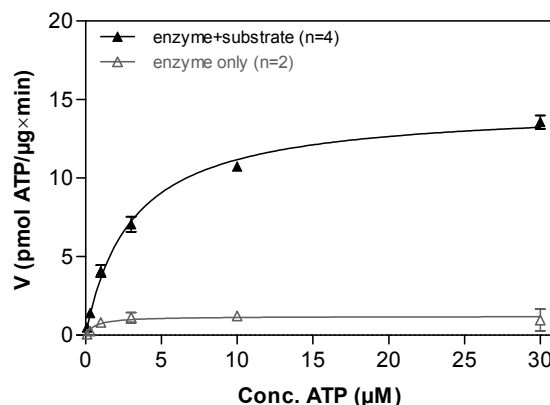
Specific EPHA6 activity (P_i transfer): 15 pmol/µg×min
ATP-K_M: 3.0 µM

**EPHA6 Lot 010:
Coomassie stain**



2.0 µg GST-EPHA6

**EPHA6 Lot 010:
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} (Sigma P-0275), 5.0 µg / ml
 - EPHA6: 2.0 µg / ml
- Filter binding assay
 - MSFC membrane (Millipore)

Additional assay technology: EPHA6 Lot 010

was also successfully tested by Reaction Biology for the use with the ADP-Glo™ EPHA6 assay from ADP-Glo assay conditions may vary from radiometric assay conditions, please inquire for assay details



ProQinase™ EPHA6

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EPHA6 Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPPEML	KMFKDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPOID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHG	RDSLEVLFG	240
241	PRRNHLQNGH	LRFPGIKTYI	DPDTYEDPSL	AVHEFAKEID	PSRIRIERY	GAGEFGEVCS	300
301	GRLKTPGKR	IPVAIKTLG	GHMDRQRDF	LREASIMGQF	DHPNIIRLEG	VVTKRSFPAI	360
361	GVEAFCPSFL	RAGFLNSIQ	PHPVPGGSL	PPRIAGRPV	MIVVEYMENG	SLDSFLRKHD	420
421	GHFTVIQLVG	MLRGIASGMK	YLSDMGYVHR	DLAARNILVN	SNLVCKVSD	GLSRVLEDDP	480
481	EAAYTTTGGK	IPIRWTAPEA	IAYRKFSAS	DAWSYGIVMW	EVMSYGERPY	WEMSNQDVIL	540
541	SIEEGYRLPA	PMGCPASLHQ	LMLHCWQKER	NHRPKFTDIV	SFLDKLIRNP	SALHTLVEDI	600
601	LVMPESPGEV	PEYPLFVTVG	DWLDSIKMGQ	YKNNFVAAGF	TTFDLISRMS	IDDIRRIGVI	660
661	LIGHQRRIVS	SIQTLRLHMM	HIQEKGFHV				720

1-218: GST Red: HIS6-tag Green: 3C cleavage site blue: EPHA6 fragment

EPHA6 wt ¹ Amino Acid Sequence							
1	MQFPSPPAAR	SSPAPQAASS	SEAAAPATGQ	PGPSCPVPGT	SRRGRPGTTP	AGRVEEEEEEE	60
61	EEEDVDKDPH	PTQNTCLRCR	HFSLRERKRE	PRRTMGGCEV	REFLLQFGFF	LPLLTAWPGD	120
121	CSHVSNNQVV	LLDTTTLVGE	LGWKTYPLNG	WDAITEMDEH	NRPIHTYQVC	NVMEPNQNNW	180
181	LRTNWNISDA	AQKIYVEMKF	TLRDCNSIPW	VLGTCKETFN	LFYMESDESH	GKFKPNQYIT	240
241	KIDTIAADES	FTQMDLGDR	LKLNTEIREV	GPIERKGFYL	AFQDIGACIA	LVSVRVFYKK	300
301	CPFTVRNLAM	FPDTIPRVDS	SSLVEVRGSC	VKSAEERDTP	KLYCGADGDW	LVPLGRCICS	360
361	TGYEEIEGSC	HACRPGFYKA	FAGNTKCSKC	PPHSLTYMEA	TSVCQCEKGY	FRAEKDPPSM	420
421	ACTRPPSAPR	NVVFNINETA	LILEWSPPSD	TGGRKDLTYS	VICKKCGLDT	SQCEDCGGGL	480
481	RFIPRHTGLI	NNSVIVLDFV	SHVNYTFEIE	AMNGVSELSF	SPKPFTAITV	TTDQDAPSLI	540
541	GVVRKDWASQ	NSIALSWQAP	AFSNGAILDY	EIKYYEKEHE	QLTYSSTRSK	APSVIITGLK	600
601	PATKYVFHIR	VRTATGYSY	SQKFEFETGD	ETSDMAAEQG	QILVIATAAV	GGFTLLVILT	660
661	LFFLITGRCQ	WYIKAKMKSE	EKRRNHLQNG	HLRFPGIKTY	IDPDTYEDPS	LAVHEFAKEI	720
721	DPSRIRIERV	IGAGEFGEVC	SGRLKTPGKR	EIPVAIKTLK	GGHMDRQRD	FLREASIMGQ	780
781	FDHPNIIRLE	GVVTKRSFPA	IGVEAFCPSF	LRAGFLNSIQ	APHPVPGGGS	LPRIAGRP	840
841	VMIVVEYMEN	GSLDSFLRKH	DGHFTVIQLV	GMLRGIASGM	KYLSDMGYVH	RDLAARNILV	900
901	NSNLVCKVSD	FGLSRVLEDD	PEAAYTTTGG	KIPIRWTAPE	AIAAYRKFSAS	SDAWSYGIVM	960
961	WEVMSYGERP	YWEMSNQDVI	LSIEEGYRLP	APMGCPASLH	QLMLHCWQKE	RNHRPKFTDI	1020
1021	VSFLDKLIRN	PSALHTLVED	ILVMPESPGE	VPEYPLFVTV	GDWLDSIKMG	QYKNNFVAAG	1080
1081	FTFDLISRM	SIDDIRRIGV	ILIGHQRRIV	SSIQTLRLHMM	MHIQEKGFHV		1140

blue: EPHA6 sequence expressed in fusionprotein

¹NCBI/Protein accession number NP_001073917.2

Recombinant Proteins