

## EPHA7

EPH receptor A7

Recombinant Human Active Protein Kinase

HGNC Symbol: EPHA7

Synonyms: EHK3, HEK11

Product No.: 0741-0000-1

Lot: 001

**Description:** Human EPHA7, C-terminal fragment, amino acids G<sub>579</sub>-V<sub>998</sub> (as in [NCBI/Protein](#) entry NP\_004431.1), activated, N-terminal GST-HIS<sub>6</sub> fusion protein with a Thrombin and a 3C cleavage site, expressed in Sf9 insect cells

**Product identity:** EPHA7, Lot 001, was confirmed as EPHA7 by mass spectroscopy LC-ESI-MS/MS

**Theoretical MW**<sub>Fusion Protein</sub>: 78,443 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:** 0.317 µg/µl

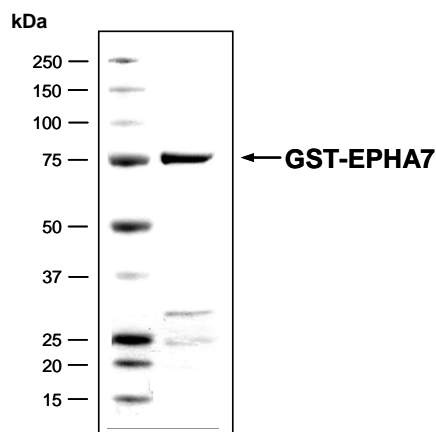
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

**Biochemical Parameters:**

Specific kinase activity (P<sub>i</sub> transfer): 21 pmol/µg × min

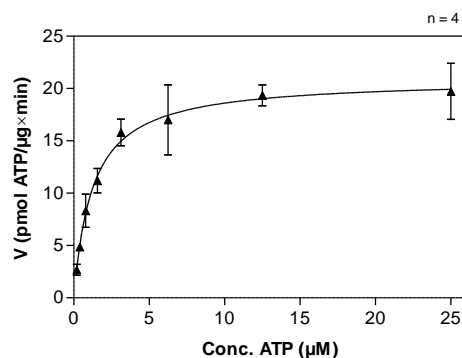
ATP-K<sub>M</sub>: 1.2 µM

### EPHA7 Lot 001: Coomassie stain



2.0 µg GST-EPHA7

### EPHA7 Lot 001: Determination of V<sub>max</sub> and K<sub>M</sub> value for ATP



#### Determination of K<sub>M</sub> value & Specific activity:

- Assay conditions:
  - 60 mM HEPES-NaOH, pH 7.5
  - 3 mM MgCl<sub>2</sub>
  - 3 mM MnCl<sub>2</sub>
  - 3 µM Na-orthovanadate
  - 1.2 mM DTT
  - 50 µg/ml PEG<sub>20,000</sub>
  - ATP (variable)
  - Substrate: Poly(Glu,Tyr)<sub>4:1</sub>, 10 µg/ml
  - Kinase: 0.8 µg/ml
- Filter binding assay
- MSFC membrane (Millipore)

#### Additional assay technology:

EPHA7 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.

This product was manufactured at ProQinase in Freiburg, Germany, and is for in vitro research use only, not for use in humans or animals. ProQinase disclaims any warranty explicitly or implied that the use of the product or parts of the product is free from third party intellectual property claims unless this is explicitly stated.

# EPHA7

Product No.: 0741-0000-1

GST-EPHA7 Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLP EML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAI PQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHG	RRRASVAAGI	240
241	LVPRGSPGLD	GIYARDSLEV	LFQGPLAMGA	PGRRHCGYSK	ADQEGDEELY	FHFKFPGTKT	300
301	YIDPETYEDP	NRAVHQFAKE	LDASCIKIER	VIGAGEFGEV	CSGRLKLP GK	RDVAVAIKTL	360
361	KVGYTEKQRR	DFLCEASIMG	QFDHPNVVHL	EGVVTRGKPV	MIVIEFMENG	ALDAFLRKHD	420
421	GQFTVIQLVG	MLRGIAAGMR	YLADMGYVHR	DLAARNILVN	SNLVCKVSDF	GLSRVIEDDP	480
481	EAVYTTTGGK	IPVRWTAPEA	IQYRKFTSAS	DVWSYGIVMW	EVMSYGERPY	WDMSNQDVIK	540
541	AIEEGYRLPA	PMDCPAGLHQ	LMLDCWQKER	AERPKEFIQV	GILDKMIRNP	NSLKTPLGTC	600
600	SRPISPLLDQ	NTPDFTTFC	VGEWLQAIKM	ERYKDNFTAA	GYSNLESVAR	MTIEDVMSLG	660
661	ITLVGHQKKI	MSSIQTMRQ	MLHLHGTGIQ	V			720

1-218: GST Red: HIS6-tag Pink: Thrombin cleavage site Green: 3C cleavage site blue: EPHA7 fragment

EPHA7 wt <sup>1</sup> Amino Acid Sequence							
1	MVFQTRYPSW	IILCYIWLLR	FAHTGEAQAA	KEVLLLD SKA	QQTELEWISS	PPNGWEEISG	60
61	LDENYTPIRT	YQVCQVMEPN	QNNWLRTNWI	SKGNAQRIFV	ELKFTLRDCN	SLPGVLGTCK	120
121	ETFNLYYYET	DYDTGRNIRE	NLYVKIDTIA	ADESFTQGD	GERKMKLNTE	VREIGPLSKK	180
181	GFYLA FQDVG	ACIALVSVKV	YYKCCWSIIE	NLAIFPDTVT	GSEFSSLVEV	RGTCVSSAEE	240
241	EAENAPRMHC	SAEGEWLVPI	GKCICKAGYQ	QKGDTCPCG	RGFYKSSSQD	LQCSRCPTHS	300
301	FSDKEGSSRC	ECEDGYRAP	SDPPYVACTR	PPSAPQNLIF	NINQTTVSLE	WSPPADNGGR	360
361	NDVTYRILCK	RCSWEQGE CV	PCGSNIGYMP	QQTGLEDNV	TVMDLLAHAN	YTFEVEAVNG	420
421	VSDLRSRQRL	FAAVSIT TGO	AAPSQVSGVM	KERVLQRSVE	LSWQEPEHPN	GVITEYEIKY	480
481	YEK DQRERTY	STVKT KSTSA	SINNLKPGTV	YVFQIRAF TA	AGYGNYS PRL	DVATLEEATG	540
541	KMFEATAVSS	EQNPV IIIAV	VAVAGT IILV	FMVFGF IIGR	RHCGYSKADQ	EGDEELYFHF	600
600	KFPGTKTYID	PETYEDPNRA	VHQFAKELDA	SCIKIERVIG	AGEFGEVCSG	RLKLP GKRDV	660
661	AVAIKTLKVG	YTEKQRDFL	CEASIMQFD	HPNVHLEGV	VTRGKPMIV	IEFMENGALD	720
721	AFLRKHDGQF	TVIQLVGMLR	GIAAGMRYLA	DMGYVHRDLA	ARNILVNSNL	VCKVSDFGLS	780
781	RVIEDDPEAV	YTTTGGKIPV	RWTAPEAIQY	RKFTSASDVW	SYGIVMWEVM	SYGERPYWDM	840
841	SNQDVIKAI E	EGYRLPAPMD	CPAGLHQ LML	DCWQKERAER	PKFEQIVGIL	DKMIRNPNSL	900
901	KTPLGTCSR P	ISPLLDQNT P	DFTTFC SVGE	WLQAIKMERY	KDNFTAAGYN	SLESVARMTI	960
961	EDVMSLGITL	VGHQKKIMSS	IQTMRAQLH	LHGTGIQV			1020

blue: EPHA7 sequence expressed in recombinant protein

<sup>1</sup>NCBI/Protein accession number NP\_004431.1

This product was manufactured at ProQinase in Freiburg, Germany, and is for in vitro research use only, not for use in humans or animals. ProQinase disclaims any warranty explicitly or implied that the use of the product or parts of the product is free from third party intellectual property claims unless this is explicitly stated.