

## PDGFR-beta

platelet derived growth factor receptor beta

Recombinant Human Active Protein Kinase

HGNC Symbol: PDGFRB

Synonyms: PDGFR1, PDGFR, JTK12

Product No.: 0099-0000-1

Lot: 013

**Description:** Human PDGFR-beta, C-terminal fragment, amino acids R<sub>561</sub>-L<sub>1106</sub> (as in [NCBI/Protein](#) entry NP\_002600.1), N-terminal GST-HIS<sub>6</sub> fusion protein with a FactorXa cleavage site, expressed in Sf9 insect cells

**Product identity:** PDGFR-beta Lot 013, was confirmed as PDGFR-beta by mass spectroscopy LC-ESI-MS/MS

**Theoretical MW<sub>Fusion Protein</sub>:** 88,029 Da

**Expression host:** Sf9 insect 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, 4 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:** 0.205 µg/µl

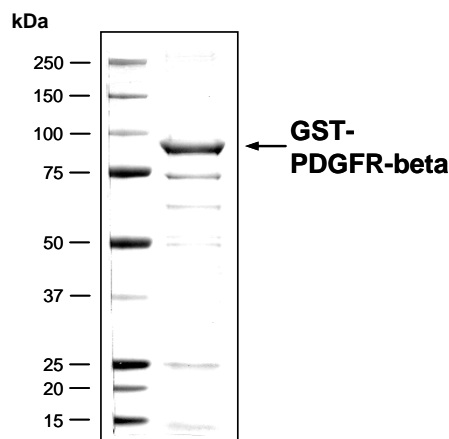
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

**Biochemical Parameters:**

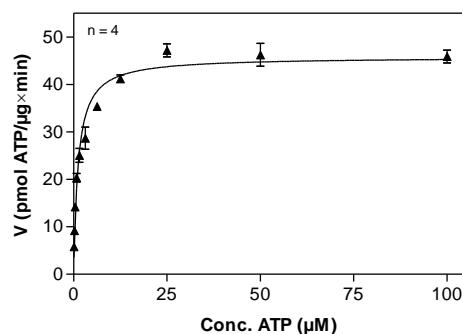
Specific kinase activity (P<sub>i</sub> transfer): 46 pmol/µg × min

ATP-K<sub>M</sub>: 1.2 µM

### PDGFR-beta Lot 013: Coomassie stain



### PDGFR-beta Lot 013: 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(Ala, Glu, Lys, Tyr)<sub>6:2:5:1</sub>, 40 µg/ml
  - Kinase: 2 µg/ml
- Filter binding assay
- MSFC membrane (Millipore)

#### Additional assay technology:

PDGFR-beta Lot 013 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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## PDGFR-beta

Product No.: 0099-0000-1

GST-PDGFR-beta Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLYERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPPEML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIPOID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	<b>LIEGRG</b> IIPGN	<b>SRYEIRWKVI</b>	240
241	<b>ESVSSDGHEY</b>	<b>IYVDPMQLPY</b>	<b>DSTWELPRDQ</b>	<b>LVLGRTLGS</b>	<b>AFGQVVEATA</b>	<b>HGLSHSQATM</b>	300
301	<b>KVAVKMLKST</b>	<b>ARSSEKQALM</b>	<b>SELKIMSHLG</b>	<b>PHLNVVNLLG</b>	<b>ACTKGGPIYI</b>	<b>ITEYCRYGDL</b>	360
361	<b>VDYLHRNKHT</b>	<b>FLQHHSDKRR</b>	<b>PPSAELYSNA</b>	<b>LPVGLPLPSH</b>	<b>VSLTGESDGG</b>	<b>YMDMSKDESV</b>	420
421	<b>DYVPMMLDMKG</b>	<b>DVKYADIESS</b>	<b>NYMAPYDNYV</b>	<b>PSAPERTCRA</b>	<b>TLINESPVLS</b>	<b>YMDLVGFSYQ</b>	480
481	<b>VANGMEFLAS</b>	<b>KNCVHRDLAA</b>	<b>RNVLICEGKL</b>	<b>VKICDFGLAR</b>	<b>DIMRDSNYIS</b>	<b>KGSTFLPLKW</b>	540
541	<b>MAPESIFNSL</b>	<b>YTTLSDVWSF</b>	<b>GILLWEIFTL</b>	<b>GGTPYPELPM</b>	<b>NEQFYNAIKR</b>	<b>GYRMAQPAHA</b>	600
601	<b>SDEIYEIMQR</b>	<b>CWEEKFEIRP</b>	<b>PFSQLVLLLE</b>	<b>RLGEGYKKK</b>	<b>YQQVDEEFLR</b>	<b>SDHPAILRSQ</b>	660
661	<b>ARLPGFHGR</b>	<b>PLDTSSVLY</b>	<b>TAVQPNEGDN</b>	<b>DYIIPLPDPK</b>	<b>PEVADEGPLE</b>	<b>GSPSLASSTL</b>	720
721	<b>NEVNTSSTIS</b>	<b>CDSPLPEQDE</b>	<b>PEPEPELEQL</b>	<b>VEPEPELEQL</b>	<b>PDSGCPVPRA</b>	<b>EAEDSFL</b>	780

1-218: GST **Red**: HIS6-tag **Pink**: Factor Xa cleavage site **blue**: PDGFR-beta fragment **boxed**: variation from RefSeq

PDGFR-beta wt <sup>1</sup> Amino Acid Sequence							
1	MRLPGAMPAL	ALKGELLLLS	LLLLLEPQIS	QGLVVTPPGP	ELVLNVSSTF	VLTCSGSAPV	60
61	VWERMSQEP	QEMAKAQDGT	FSSVLTLTNL	TGLDTGEYFC	THNDSRGLET	DERKRLYIFV	120
121	PDPTVGFLPN	DAELFIFL	EITEITIPCR	VTDPQLVVT	HEKKGVALP	VPYDHRGFS	180
181	GIFEDRSYIC	KTTIGDREVD	SDAYVYRLQ	VSSINVSNA	VQTVVRQGEN	ITLMCIVIGN	240
241	EVVNFWEWY	RKESGRLEVP	VTDFLLDMPY	HRSILHIPS	AELEDSGYT	CNVTESVNDH	300
301	QDEKAINITV	VESGYVRLG	EVGTLQFAEL	HRSRTLQVVF	EAYPPPTVLW	FKDNRTLGD	360
361	SAGEIALSTR	NVSETRYVSE	LTLVRVKVAE	AGHYTMRAF	EDAQVLSFQ	LQINVPVRL	420
421	ELSEHPDSE	EQTVRRCRGR	MPQPNIIWSA	CRDLKRCPRE	LPPTLLGNSS	EEESQLETNV	480
481	TYWEEEQEFE	VVSTLRRLQHV	DRPLSVRCTL	RNAVQDTEQ	VIVVPHSLPF	KVVVISAILA	540
541	LVLTLIISLI	ILIMLWQKKP	<b>RYEIRWKVIE</b>	<b>SVSSDGHEYI</b>	<b>YVDPMQLPYD</b>	<b>STWELPRDQL</b>	600
601	<b>VLGRTLGS</b>	<b>FGQVVEATAH</b>	<b>GLSHSQATMK</b>	<b>VAVKMLKSTA</b>	<b>RSSEKQALMS</b>	<b>ELKIMSHLGP</b>	660
661	<b>HLNVNLLGA</b>	<b>CTKGGPIYII</b>	<b>TEYCRYGLV</b>	<b>DYLHRNKHTF</b>	<b>LQHHSDKRRP</b>	<b>PSAELYSNAL</b>	720
721	<b>PVGLPLPSHV</b>	<b>SLTGESDGGY</b>	<b>MDSKDESVD</b>	<b>YVPMMLDMGD</b>	<b>VKYADIESSN</b>	<b>YMAPYDNYVP</b>	780
781	<b>SAPERTCRAT</b>	<b>LINESPVLSY</b>	<b>MDLVGFSYQV</b>	<b>ANGMEFLASK</b>	<b>NCVHRDLAAR</b>	<b>NVLICEGKLV</b>	840
841	<b>KICDFGLARD</b>	<b>IMRDSNYISK</b>	<b>GSTFLPLKWM</b>	<b>APESIFNSLY</b>	<b>TTLSDVWSFG</b>	<b>ILLWEIFTLG</b>	900
901	<b>GTPYPELPMN</b>	<b>EQFYNAIKRG</b>	<b>YRMAQPAHAS</b>	<b>DEIYEIMQKC</b>	<b>WEEKFEIRPP</b>	<b>FSQLVLLLER</b>	960
961	<b>LLGEGYKKKY</b>	<b>QQVDEEFLRS</b>	<b>DHPAILRSQA</b>	<b>RLPGFHGLRS</b>	<b>PLDTSSVLYT</b>	<b>AVQPNEGDND</b>	1020
1021	<b>YIIPLPDPKP</b>	<b>EVADEGPLEG</b>	<b>SPSLASSTLN</b>	<b>EVNTSSTISC</b>	<b>DSPLEPQDEP</b>	<b>EPEPQLEQLV</b>	1080
1081	<b>EPEPELEQLP</b>	<b>DSGCPAPRAE</b>	<b>AEDSFL</b>				1140

**blue**: PDGFR-beta sequence expressed in recombinant protein **Red**: variant in recombinant protein

<sup>1</sup>NCBI/Protein accession number NP\_002600.1  
A1096V: SNP variation see NCBI/dbSNP ID: rs114435947

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