

ProQinase™ PIM3

Pim3 oncogene

Recombinant Human Active Protein Kinase

HGNC Symbol: PIM3

Synonyms: /

Product No.: 0932-0000-1

Lot: 007

Description: Human PIM3, full length, amino acids M₁-L₃₂₆ (as in NCBI/Protein entry NP_001001852.1), N-terminal GST-HIS₆ fusion protein with a 3C cleavage site, expressed in Sf9 insect cells

Product identity: PIM3 Lot 007, was confirmed as PIM3 by mass spectroscopy LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 64,368 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

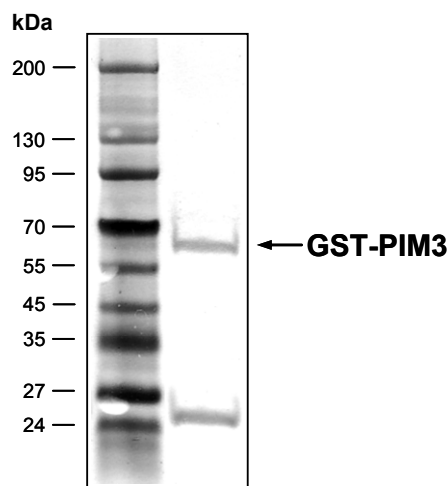
For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10µl are not advisable. Avoid repeated freeze-thaw cycles!

Protein concentration: 0.157 µg/µl (Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Biochemical Parameters:

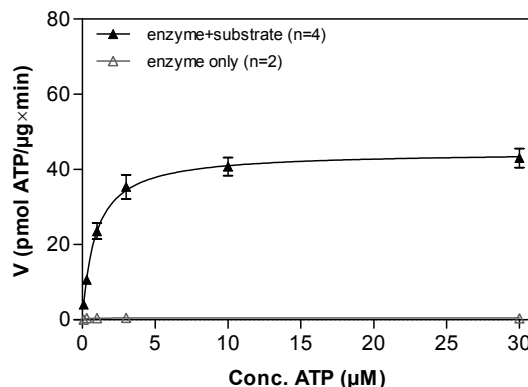
Specific kinase activity (P_i transfer): 45 pmol/µg×min
ATP-K_M: 0.9 µM

PIM3 Lot 007: Coomassie stain



2.0 µg GST-PIM3

PIM3 Lot 007: 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: GSK3-derived peptide (R11-SGRARTSSFAEPGGK), 80 µg / ml
- PIM3: 2.0 µg / ml
- Filter binding assay
 - MSFC membrane (Millipore)

Additional assay technology: PIM3 Lot 007

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



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PIM3 Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLIERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQ SMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLP EML	KMFEDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAI PQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHGH	RDSL LEVL FQG	240
241	PLAMV MLLSK	FGSLA HLCGP	GGVDH LPVKI	LQPAK ADKES	FEKAY QVGAV	LGSGG FGTVY	300
301	AGSRI ADGLP	VAVKH VVKER	VTEWG SLGGA	TVPLE VLLR	KVGA AGGARG	VIRLL DWFER	360
361	PDGFL LVLER	PEPAQ DLFDF	ITERG ALDEP	LARRF FAQVL	AAVRH CHSCG	VVHRD IKDEN	420
421	LLVDL RSGEL	KLIDF GSGAL	LKDTV YTFDF	GTRVY SPPEW	IRYHR YHGRS	ATVWS LGVL	480
481	YDMVC GDIPF	EQDEE ILRGR	LLFR RVSP	CQQLI RWCLS	LRP SERPSLD	QIAA HPWMLG	540
541	ADGGA PESCD	LRLCT LDPDD	VASTT SSSES	L			600

1-218: GST **Red:** HIS6-tag **Green:** 3C cleavage site **blue:** PIM3

PIM3 wt ¹ Amino Acid Sequence							
1	MLLSK FGSLA	HLCGP GGVDH	LPVKI LQPAK	ADKES FEKAY	QVGA VLGSGG	FGTVY AGSRI	60
61	ADGLP VAVKH	VVKER VTEWG	SLGGAT VPLE	VVLLR KVGAA	GGARG VIRLL	DWFER PDGFL	120
121	LVLER PEPAQ	DLFDF ITERG	ALDEP LARRF	FAQVL AAVRH	CHSCG VVHRD	IKDEN LLVDL	180
181	RSGEL KLIDF	GSGAL LKDTV	YTDFG TRVY	SPPEW IRYHR	YHGRS ATVWS	LGVLL YDMVC	240
241	GDIPF EQDEE	ILRGR LLFRR	RVSP ECQQLI	RWCLS LRPSE	RPSLD QIAAH	PWMLG ADGGA	300
301	PESCD LRLCT	LDPDD VASTT	SSSES L				360

blue: PIM3 sequence expressed in fusionprotein

¹NCBI/Protein accession number NP_001001852.1

Recombinant Proteins