

ProQinase™ NIM1K

NIM1 serine/threonine protein kinase

Recombinant Human Active Protein Kinase

HGNC Symbol: NIM1K

Synonyms: NIM1, MGC42105

Product No.: 2179-0000-1

Lot: 001

Description: Human NIM1K, full-length, amino acids M₁-L₄₃₆ (as in [NCBI/Protein](#) entry NP_699192.1), N-terminal GST-HIS₆ fusion protein with a 3C cleavage site, expressed in Sf9 insect cells

Product identity: NIM1K Lot 001, has been verified by mass spectrometry LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 77695 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, 15 mM reduced glutathione, 20 % glycerol

Storage temperature: -80°C

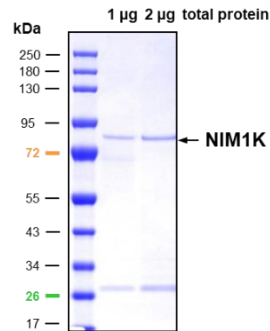
For complete recovery, mix well and spin before use. Product must not be stored in diluted solutions, aliquots below 10 µl are not advisable. Avoid repeated freeze-thaw cycles!

Protein concentration: 0.322 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

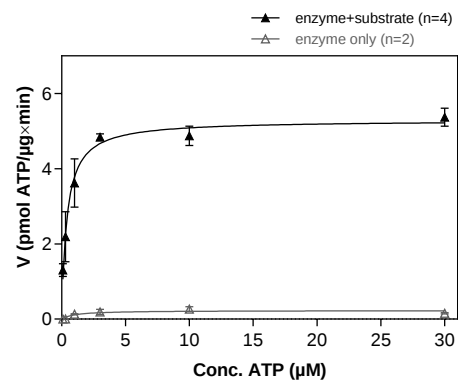
Biochemical Parameters:

Specific kinase activity (P_i transfer): 5.3 pmol/µg*min
ATP-K_M: 0.4 µM

**NIM1K Lot 001:
Coomassie stain**



**NIM1K Lot 001:
Determination of V_{max} and K_M value for ATP**



- 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: RBER-CHKtide 40 µg/ml
 - Kinase: 3 µg/ml

Assay technology:
Radiometric filter binding assay
MSFC membrane (96 well plate, Millipore)

Sequence information

GST-NIM1K Recombinant Fusion Protein Amino Acid Sequence							
1	MSPILGYWKI	KGLVQPTRL	LEYLEEKYEE	HLIERDEGDK	WRNKKFELGL	EFNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPEML	KMFKDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHGG	RDSLEVLFGG	240
241	MTAVYMNGG	GLVNPHYARW	DRRDSVESGC	QTESSKEGEE	GQPRQLTPFE	KLTQDMSQDE	300
301	KVREITLTK	RIGFYRIRGE	IGSGNFSQVK	LGIHSLTKEK	VAIKILDKTK	LDQKTQRLLS	360
361	REISSMEKLH	HPNIIRLYEV	VETLSKLHLV	MEYAGGGELE	GKISTEGKLS	EPESKLIFSQ	420
421	IVSAVKHME	NQIIHRDLKA	ENVFYTSNTC	VKVGDFGFST	VSKKGEMLNT	FCGSPPYAAP	480
481	ELFRDEHYIG	IYVDIHALGV	LLYFMVTGTM	PFRAETVAKL	KKSILEGTYS	VPPHVSEPCH	540
541	RLIRGLVQOI	PTERYGIDCI	MNDEWMQGV	YPTPLEPFQL	DPKHLSETST	LKEEENEVKS	600
601	TLEHLGITEE	HIRNNQGRDA	RSSITGVYRI	ILHRVQRKKA	LESVPVMMLP	DPKERDLKKG	660
661	SRVYRGIRHT	SKFCSIL					720

1-218: GST Red: HIS6-tag Green: 3C cleavage site blue: NIM1K

NIM1K wt ¹ Amino Acid Sequence							
1	MTAVYMNGGG	LVNPHYARWD	RRDSVESGCQ	TESSKEGEEG	QPRQLTPFEK	LTQDMSQDEK	60
61	VVREITLTKR	IGFYRIRGEI	GSNGFSQVKL	GIHSLTKEKV	AIKILDKTKL	DQKTQRLLSR	120
121	EISSMEKLHH	PNIIRLYEVV	ETLSKLHLVM	EYAGGGELEF	KISTEGKLSE	PESKLIFSQI	180
181	VSAVKHMHEN	QIIHRDLKAE	NVFYTSNTCV	KVGDFGFSTV	SKKGEMLNTF	CGSPPYAAPE	240
241	LFRDEHYIGI	YVDIHALGVL	LYFMVTGTMP	FRAETVAKLK	KSILEGTYSV	PPHVSEPCHR	300
301	LIRGLVQOIP	TERYGIDCIM	NDEWMQGVPI	PTPLEPFQLD	PKHLSETSTL	KEEENEVKST	360
361	LEHLGITEEH	IRNNQGRDAR	SSITGVYRII	LHRVQRKKAL	ESVPVMMLPD	PKERDLKKGS	420
421	RVYRGIRHTS	KFCSIL					480

blue: NIM1K sequence expressed in recombinant protein

¹[NCBI/Protein](#) accession number NP_699192.1