

ProQinase™ NIM1K 56-350

NIM1 serine/threonine protein kinase

Recombinant Human Active Protein Kinase

HGNC Symbol: NIM1K

Synonyms: NIM1, MGC42105

Product No.: 1987-0000-1

Lot: 001

Description: Human NIM1K, internal fragment, amino acids S₅₆-L₃₅₀ (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 56-350 Lot 001, has been verified by mass spectrometry LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 61502 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!

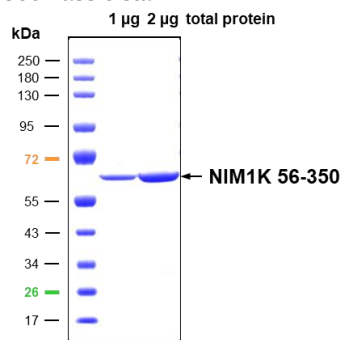
Protein concentration: 0.778 µg/µl
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Biochemical Parameters:

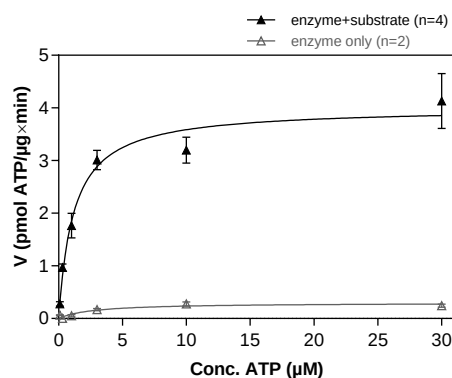
Specific kinase activity (P_i transfer): 4 pmol/µg*min

ATP-K_M: 1.2 µM

NIM1K 56-350 Lot 001: Coomassie stain



NIM1K 56-350 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: 2 µg/ml

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

Sequence information

GST-NIM1K 56-350 Recombinant Fusion Protein Amino Acid Sequence

1	MSPILGWYKI	KGLVQPTRL	LEYLEEKYEE	HLIERDEGDK	WRNKKFELGL	EFPNLPYYID	60
61	GDVKLTQSMA	IIRYIADKHN	MLGGCPKERA	EISMLEGAVL	DIRYGVSRIA	YSKDFETLKV	120
121	DFLSKLPEML	KMFKDRLCHK	TYLNGDHVTH	PDFMLYDALD	VVLYMDPMCL	DAFPKLVCFK	180
181	KRIEAIQID	KYLKSSKYIA	WPLQGWQATF	GGGDHPPKSD	PMGHHHHHHG	RDSLEVLFGG	240
241	PSQDEKVVRE	ITLGKRIGFY	RIRGEIGSGN	FSQVKLGIHS	LTKEKVAIKI	LDKTKLDQKT	300
301	QRLLSREISS	MEKLHHPNII	RLYEYVETLS	KLHLVMEYAG	GGELFGKIST	EGKLSEPESEK	360
361	LIFSQIVSAV	KHMHENQIIH	RDLKAENVFY	TSNTCVKVG	FGFSTVSKKG	EMLNTFCGSP	420
421	PYAAPELFRD	EHYIGIYVDI	WALGVLLYFM	VTGTMPFRAE	TVAKLKKSL	EGTYSVPPHV	480
481	SEPCHRLIRG	VLQQIPTERY	GIDCIMNDEW	MQGVYPPTPL	EPFQLDPKHL	SETSTL	540

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

NIM1K wt¹ Amino Acid Sequence

1	MTAVYMNGGG	LVNPHYARWD	RRDSVESGCQ	TESSKEGEEG	QPRQLTPFEK	LTQDMSQDEK	60
61	VVREITLGKR	IGFYRIRGEI	GSGNFSQVKL	GIHSLTKEKV	AIKILDKTKL	DQKTQRLLSR	120
121	EISSMEKLHH	PNIIRLYEVV	ETLSKLHLVM	EYAGGGELFG	KISTEGKLSE	PESKLIFSQI	180
181	VSAVKHMHEN	QIIHRDLKAE	NVFTSNTCV	KVGDFGFSTV	SKKGEMLNTF	CGSPPYAAPE	240
241	LFRDEHYIGI	YVDIWAIGVL	LYFMVTGTMP	FRAETVAKLK	KSILEGTYSV	PPHVSEPCHR	300
301	LIRGVLQQIP	TERYGIDCIM	NDEWMQGVPI	PTPLEPFQLD	PKHLSETSTL	KEEENEVKST	360
361	LEHLGITEEH	IRNNQGRDAR	SSITGVYRII	LHRVQRKKAL	ESVPVMMLPD	PKERDLKKGS	420
421	RVYRGIRHTS	KFCSTL					480

blue: NIM1K sequence expressed in recombinant protein

¹[NCBI/Protein](https://www.ncbi.nlm.nih.gov/Protein/NP_699192.1) accession number NP_699192.1