

Aurora-C

aurora kinase C

Recombinant Human Active Protein Kinase

HGNC Symbol: AURKC

Synonyms: AIE2, AIK3, ARK3, ARK-3, AurC, STK13

Product No.: 0315-0000-1

Lot: 009

Description: Human Aurora-C, full length, amino acids M₁-S₂₇₅ (as in NCBI/Protein entry NP_003151.2), N-terminal GST fusion protein with a Thrombin cleavage site, expressed in Sf9 insect cells

Product identity: Aurora-C Lot 009, was confirmed as Aurora C by mass spectroscopy LC-ESI-MS/MS

Theoretical MW_{Fusion Protein}: 58,480 Da

Expression host: Sf9 insect cells

Purification: GST-Affinity Chromatography

Activation: This kinase was not activated by special procedures

Storage buffer: 50 mM Tris-HCl, pH 8.0, 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: 0.116 µg/µl

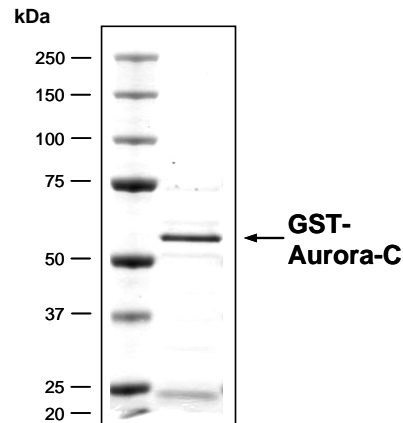
(Bradford method using BSA [Sigma, cat# A-7638, Lot 79H7641] as standard protein)

Biochemical Parameters:

Specific kinase activity (P_i transfer): 4.2 pmol/µg × min

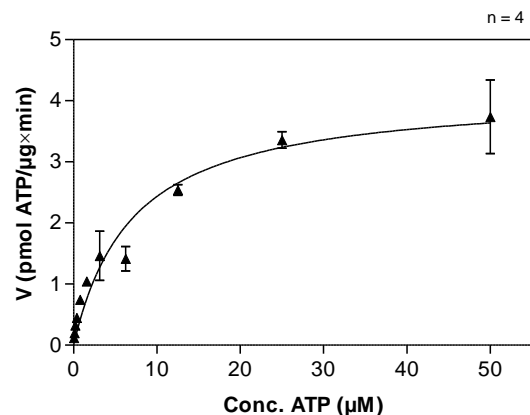
ATP-K_M: 7.1 µM

**Aurora-C Lot 009:
Coomassie stain**



2.0 µg GST-Aurora-C

**Aurora-C Lot 009:
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: CDC25C-derived peptide 100 µg/ml
 - Kinase: 4 µg/ml
- Filter binding assay
 - MSPH membrane (Millipore)

Additional assay technology: Aurora-C Lot 009

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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GST-Aurora-C 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	LVPRGSMRRL	TVDDFEIGRP	240
241	LGKGFKNVY	LARKESHFI	VALKVLFSQ	IEKEGLEHQL	RREIEIQAHL	QHPNLRILYN	300
301	YFHDARRVYL	ILEYAPRGEL	YKELQKSEKL	DEQRTATIIE	ELADALTYCH	DKKVIHRDIK	360
361	PENLLLGRG	EVKIADFGWS	VHTPSLRRKT	MCGLDYLPP	EMIEGRTYDE	KVDLWCIGVL	420
421	CYELLVGYPP	FESASHSETY	RRILKVDVRF	PLSMPLGARD	LISRLRLRYQP	LERLPLAQIL	480
481	KHPWVAHSR	RVLPPCAQMA	S				540

1-218: GST **Pink**: Thrombin cleavage site **blue**: Aurora-C

Aurora-C wt ¹ Amino Acid Sequence							
1	MRRLTVDDFE	IGRPLGKGF	GNVYLARLKE	SHFIVALKVL	FKSQIEKEGL	EHQLRREIEI	60
61	QAHLQHPNIL	RLYNYFHDAR	RVYLILEYAP	RGELYKELQK	SEKLDEQRTA	TIIIEELADAL	120
121	TYCHDKKVIH	RDIKPENLLL	GFRGEVKIAD	FGWSVHTPSL	RRKTMCGTLD	YLPPEMIEGR	180
181	TYDEKVDLWC	IGVLCYELLV	GYPFESASH	SETYRRILKV	DVRFPLSMPL	GARDLISRL	240
241	RYQPLERLPL	AQILKHPWVQ	AHSRRVLPPC	AQMAS			300

blue: Aurora-C sequence expressed in recombinant protein

¹NCBI/Protein accession number NP_003151.2