

Certificate of Analysis

PAK7 , 10 µg

Recombinant Human, p21(CDKN1A)-Activated Kinase 7, Histidine-tagged



Part Number: PV4405

Lot Number: 1729132C

Immediate Storage: -80°C

Shipping Conditions: dry ice

5791 Van Allen Way

Carlsbad, CA 92008

Phone: 760.603.7200

Fax: 760.602.6500

www.lifetechnologies.com

Description:

Recombinant Human protein, Catalytic Domain (amino acids 425-719), His-tagged, expressed in insect cells. No special measures were taken to activate this kinase.

Specific Activity:

3,670 nmoles of phosphate transferred to PAKtide peptide substrate (CRRKSLVGpTPYWMAPE) per minute per mg of total protein at 30°C. Activity determined at a final protein concentration of 0.33 µg/mL.

Concentration:

0.16 mg/mL total protein as measured using the Bradford protein assay with BSA as a standard.

Calculated **4,260 nM**.

Aliases:

PAK5, p21-activated kinase 7

Storage and Handling:

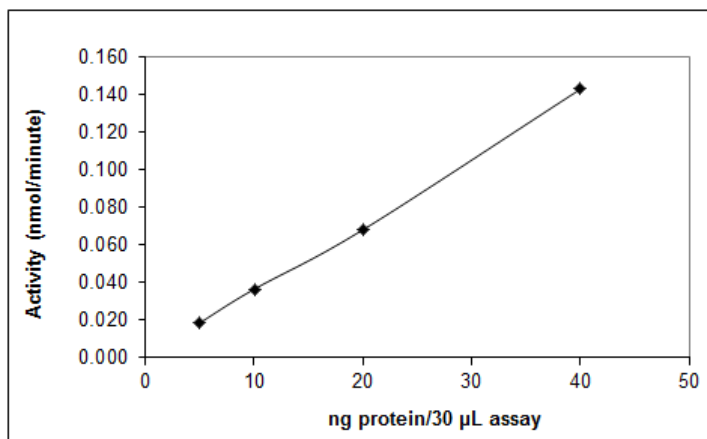
For maximum recovery please spin prior to use. Aliquots of the 5 µg, 10µg and 20µg sizes of kinase are not recommended as materials can be used in original packaging until exhausted. For larger sizes, the number of freeze/thaws may be reduced by preparing aliquots, aliquots below 20 µL are not recommended. **Please never store a kinase diluted.** If properly stored at -80°C, this product is guaranteed for 6 months from date of purchase.

Storage Buffer:

50 mM Tris (pH 7.5), 150 mM NaCl, 0.5 mM EDTA, 0.02% Triton® X-100, 2 mM DTT and 50% Glycerol.

QUALITY ASSURANCE

PAK7 Activity Graph



Dilution Buffer:

20 mM Tris (pH 7.5), 0.02% Triton® X-100, 0.1 mg/mL BSA, 2 mM DTT, 0.5 mM Na₃VO₄ and 10% Glycerol.

Assay Conditions:

PAK7 was pre-diluted in enzyme dilution buffer and assayed in 25 mM HEPES (pH 7.5), 10 mM MgCl₂, 0.5 mM EGTA, 0.5 mM Na₃VO₄, 5 mM β-glycerophosphate, 2.5 mM DTT, 0.01% Triton® X-100, 100 µM ATP, 200 µM PAKtide peptide substrate (CRRKSLVGpTPYWMAPE) and trace [³²P]-γ-ATP for 10 minutes at 30°C.

Gel Information for PAK7

Page Description: The SDS-PAGE and/or Native PAGE were run on 4-20% Tris-Glycine Novex® gels (Catalog #: EC6025BOX).

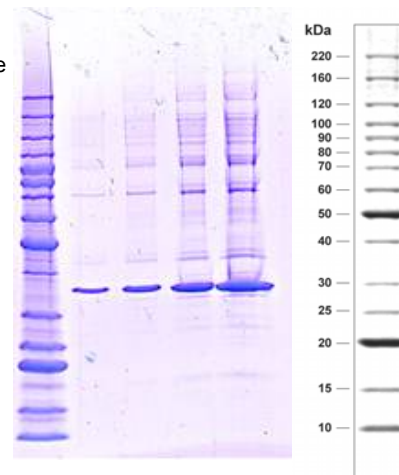
Lane 1: Invitrogen™ BenchMark™ Protein Ladder (Catalog #: 10747-012).

Lane 2: 0.5 µg PAK7

Lane 3: 1.0 µg PAK7

Lane 4: 2.5 µg PAK7

Lane 5: 5.0 µg PAK7



Purity:

80% as determined by a Coomassie® blue stained SDS-PAGE gel.

Molecular Weight:

37.6 kDa. Calculated from the protein sequence(s).

Mass Spectrometry:

PAK7 was subjected to proteolytic digest followed by mass spec analysis. The resulting MS/MS data verified PAK7 identity by comparison against the amino acid sequence(s) of the recombinant protein.

Protein sequence alignment with reference sequence(s)

GenBank Accession Number: NP_065074

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1 MSYHHHHHHH DYDIPTTENL YFQGITSLYK KAGTSRVSHE QFRAALQLVV SPGDPREYLA NFIKIGEGST GIVCIATEKH TGKQVAVKKM DLRKQQRREL IVGN PAK7
425 -----SRVSHE QFRAALQLVV SPGDPREYLA NFIKIGEGST GIVCIATEKH TGKQVAVKKM DLRKQQRREL NP_065074

101 LFNEVVIMRD YHHDNVVDMY SSVLVGDELW VVMEFLEGGA LTDIVTHTRM NEEQIATVCL SVLRALSYLH NQGVVHRDIK SDSILLTSDG RIKLSDFGFC
491 LFNEVVIMRD YHHDNVVDMY SSVLVGDELW VVMEFLEGGA LTDIVTHTRM NEEQIATVCL SVLRALSYLH NQGVVHRDIK SDSILLTSDG RIKLSDFGFC

201 AQVSKEVPKR KSLVGTPYWM APEVISRLPY GTEVDIWSLG INVIEMIDGE PPYFNEPPLQ AMRRIRDSLP PRVKDLHKVS SVLRGFLDLM LVREPSQRAT
591 AQVSKEVPKR KSLVGTPYWM APEVISRLPY GTEVDIWSLG INVIEMIDGE PPYFNEPPLQ AMRRIRDSLP PRVKDLHKVS SVLRGFLDLM LVREPSQRAT

301 AQELLGHPFL KLAGPPSCIV PLMRQYRHH.
691 AQELLGHPFL KLAGPPSCIV PLMRQYRHH
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* highlighted residues denote differences from the reference protein sequence(s).



Nichole Reaksecker, QA Manager

Date: 03/Aug/2015

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