

## Product datasheet for **SC323654**

### ALPK1 (NM\_025144) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ALPK1 (NM_025144) Human Untagged Clone
Tag:	Tag Free
Symbol:	ALPK1
Synonyms:	8430410J10Rik; LAK
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC323654 sequence for NM_025144 edited (data generated by NextGen Sequencing)

```

ATGAATAATCAAAAAGTGGTAGCTGTGCTACTGCAAGAGTGCAAGCAAGTCTGGATCAG
CTCTTGTTGGAAGCGCCAGATGTGTCGGAAGAGGACAAGAGCGAGGACCAGCGCTGCAGA
GCTTTACTCCCCAGCGAGTTAAGGACCCTGATCCAGGAGGCAAAGGAAATGAAGTGGCCC
TTCGTGCCTGAAAAGTGGCAGTACAAACAAGCCGTGGGCCAGAGGACAAAAACAACCTG
AAGGATGTGATTGGCGCCGGTTGCAGCAGTTACTGGCGTCCCTGAGGGCCTCCATCCTC
GCTCGGGACTGTGCGGCTGCGGCGGCTATTGTGTTCTTGGTGGACCGGTTCTGTATGGG
CTCGACGCTCTGAAAACTTCTGCAGGTCGCCAAAGGTCTCCACAAGTGCAGCCAGCC
ACGCCAATTGCCCGCAGGTGGTTATTCGCCAAGCCGAATCTCCGTGAAGTGCAGAAAA
CTTTTAAAGCAGAGTATATTCTGAGCAGTCTAATAAGCAACAATGGAGCAACGGGTACC
TGGCTGTACAGAAATGAAAGTGACAAGGTCCTGGTGCAGTCGGTCTGTATACAGATCAGA
GGGAGATTCTGCAAAAGCTGGGGATGTGGTACGAAGCAGCAGAGTTAATATGGGCCTCC
ATTGTAGGATATTTGGCACTTCTCAGCCGGATAAAAAGGGCCTCTCCACGTGCTAGGT
ATACTGGCAGACATCTTTGTTTCCATGAGCAAGAACGATTATGAAAAGTTTAAAAACAAT
CCACAAATTAATTTGAGCCTGCTGAAGGAGTTTGACCACCATTTGCTGTCCGCTGCAGAA
GCCTGCAAGCTGGCAGCTGCCTTCAGTGCCTATACGCCGCTCTTCGTGCTCACAGCTGTG
AATATCCGTGGCAGCTGTTTATTGTCTACAGTAGTTCAAATGACTGTCTCCAGAATTG
AAAAACTTACATCTGTGTGAAGCCAAAGAGGCCCTTTGAGATTGGCCTCCTCACCAAGAGA
GATGATGAGCCTGTTACTGGAAAACAGGAGCTTACAGCTTTGTCAAAGCTGCTTTTCGGT
CTCACCACAGTGACAGAAAGCTCCATGGGGAGACAGGGACGGTCCATGCAGCAAGTCAG
CTCTGTAAGGAAGCAATGGGGAAGCTGTACAATTTGAGCACTTCTCCAGAAGTCAGGAC
AGAGAAGCTCTGTCTCAAGAAGTTATGTCTGTGATTGCCAGGTGAAGGAACATTTACAA
GTTCAAAGCTTCTCAAATGTAGATGACAGATCTTATGTTCCCGAGAGTTTCGAGTGCAGG
TTGATAAACTTATCTTGCATGGGCAAGGGGATTTCCAAAAATCCTTGACACCTATTCA
CAGCACCATACTTCGGTGTGTGAAGTATTTGAAAGTGATTGTGGAACAACAAAAATGAA
CAGAAAGATGCAAAAACAGGAGTCTGCATCACTGCTCTAAAAACAGAAATAAAAACATA

```



[View online »](#)

GATACTGTGAGTACTACTCAAGAAAAGCCACATTGTCAAAGAGACACAGGAATATCTTCC  
 TCCCTAATGGGTAAGAATGTTTCAGAGGGAACTCAGAAGGGGAGGAAGGAGAACTGGACC  
 CATTCTGATGCATTTTCGAGTCTCCTTGGATCAAGATGTGGAGACTGAGACTGAGCCATCG  
 GACTACAGCAATGATGAGGGAGCTGTTTTCAACAAGTCTCTGAGTGGCAGCCAGACTTCC  
 AGTGCTTGGAGCAACTTATCAGGGTTTGTCTCTGCAAGCTGGGAGGAAGTGAATTAT  
 CACGTTGACGACAGGTCAGCCAGAAAAGAGCCTGGCAAAGAACATCTGGTGGACACTCAG  
 TGTTCCACTGCCTTGTCTGAGGAGCTAGAGAATGACAGGGAAGGCAGAGCTATGCATTCA  
 TTGCGTTACAGCTTCATGATCTCTCTTTCAGGAACCCAACAATGACAATTTGGAGCCT  
 TCTCAAAATCAGCCACAGCAACAGATGCCCTTGACACCCTTCTCGCCTCATAATACCCCA  
 GGCATTTTCTTGGCCCCTGGTGCAGGGCTTCTAGAAGGAGCTCCAGAAGGTATCCAGGAA  
 GTCAGAAACATGGGACCCAGAAATACTTCTGCTCACTCCAGACCCTCATATCGTTCTGCT  
 TCTTGGTCTTCTGATTCTGGTAGGCCCAAGAATATAGGCACACATCCTTCAGTCCAAAAA  
 GAAGAAGCCTTTGAAATAATTGTTGAGTTTCCAGAAACCAACTGCGATGTCAAAGACAGG  
 CAGGGGAAAGAGCAGGGAGAAGAAATTAGTGAAGAGGGCAGGCCCTACATTTAAAGCT  
 AGTCCCTCCTGGGTTGACCCAGAAGGAGAAACAGCAGAAAGCACTGAAGATGCACCCTTA  
 GACTTTCACAGGGTCTGCACAATTCTCTGGGAAACATTTCCATGCTGCCATGTAGCTCC  
 TTCACCCCTAATTGGCCTGTTCAAAATCCTGACTCCAGAAAAAGTGGTGGCCAGTCGCA  
 GAGCAGGGCATCGACCCTGATGCCTCCACAGTGGATGAGGAGGGGCAACTGCTCGACAGC  
 ACGGATGTTCCCTGCACAAATGGGCACGGCTCTCATAGACTGTGCATTCTGAGACAGCCG  
 CCTGGTCAGAGGGCGGAGACCCCAATTCTCTGTAAGCGGTAACATCCTTCCCTGTC  
 CTCAGCGAGGACTGCACTACCACAGAGGAAGGAAATCAGCCTGGAACATGCTAAACTGC  
 AGCCAGAACTCCAGCTCATCCTCAGTGTGGTGGCTGAAATCACCTGCATTTTCCAGTGGT  
 TCTTCTGAGGGGACAGCCCTTGGTCTATCTGAATTCAGTGGGAGTTCTTGGGTTTCA  
 TTGCCGGGAAAGATGAGGAAAGAGATCCTTGAGGCTCGCACCTTGCAACCTGATGACTTT  
 GAAAAGCTGTTGGCAGGAGTGAAGCATGATTGGCTGTTTCAGAGACTAGAGAATACGGGG  
 GTTTTTAAGCCAGTCAACTCCACCGAGCAGATAGTGTCTTTTTGTTAAAAATATCAAAA  
 AAATCTGAACTGTGGACGGCCAGGAACTATTGTCTATTTGGGGACTACTTGACTGTG  
 AAGAAAAAGGCAGACAAAGAAATGCTTTTTGGGTTTCATCATCTTCATCAAGAAGAAAT  
 CTGGGGAGGTATGTTGGGAAAGACTATAAGGAGCAGAAGGGGCTCTGGCACCCTCACT  
 GATGTGGAGCGGAGATGACCGCACAGCACTATGTGACAGAATTAACAAGAGACTCTAT  
 GAACAAAACATTTCCACCCAGATATTCTACATCCCATCCACAATACTACTGATTTTAGAG  
 GACAAGACAATAAAGGGATGTATCAGTGTGGAGCCTTACATACTGGGAGAATTTGTA  
 TTTGCAATAAACAGAAAGTGGTGAACAGAAATACAAAGCCACAGAATATGGCTTGGCC  
 TATGGCCATTTTTCTTATGAGTTTTCTAATCATAGAGATGTTGTGGTTCGATTTACAAGGT  
 TGGGTAACCGGTAATGGAAAAGGACTCATCTACCTCACAGATCCCAGATTCACCTCCGTT  
 GATCAGAAAGTTTTCACTACCAATTTTGGAAAGAGAGAAATTTTTACTTCTTTAATAAC  
 CAGCATGTGGAATGTAATGAAATCTGCCATCGTCTTTCTTTGACTAGACCTTCAATGGAG  
 AAACCATGCACATAG

Clone variation with respect to NM\_025144.3  
 1694 g=>a;1925 a=>g;2109 t=>c;2196 g=>a;2582 t=>c;3252 a=>g

<b>5' Read Nucleotide Sequence:</b>	>OriGene 5' read for mutant NM_025144 unedited ACCCGCCCGTTGAGCAATGGGCGGTAGGCGTGTACGGAGGGAGGTCTATATAAGCAGAGCTCGTTTAGTG AACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACCAGCTCATTCTCAAA GATGCTGCAAATCTAATAAATCCCAGGTAAGGAGAGGTTGGCCTGGCTTTTTTTGTTTGTGTTTGT TTGTTTTGTTTGTGTTTGTGTTTTGTTTTTTCAGACAGGGTCTAACTCTATTGTCTGGATGGAGTGCAGT GGCACAATCATAATTCACCTGCGACCTCAAACCTTTGGACACAAGAAATCCCTCCTCAGCATCCTGAGT AGCTAAGACTATAGGTAATTGATCACCCTAGACCCAGGGACACCAATTCATCGTAATCATCATGAATAA TCAAAAAGTGGTAGCTGTGCTACTGCAAGAGTGCAAGCAAGTGCTGGATCAGCTCTTGTGGAAAGCGCCA GATGTGTCGGAGAGGACAAGAGCGAGGACCAGCGCTGCAGAGCTTTACTCCCAGCGAGTTAAGGACCCTG ATCCAGGAGCAAGGAAATGAGTGGCCCTTCGTGCTTGAAGTGCAGTACAAAACAGCGGTGGCCAAAGGAC AAACAACTGAGATGTGATTGCGCGGTTGCAGCAGTACTGAATTAGGTGCAAAGAGTTATTGCTCAGGA AGACAAACAGTATGGTGAATTGACTTACGCTTTCTTATCCACTCAATTTCCATCGGAGCACAATGGAAAC TTGAAAACAGGCTCTAGGCCTCACTTCTTGACTGGCGGTGGCATTGTTCTGGAACGTTCTGTAGCTCA CTCTGACTTCAGGTCAGTTCATTGGCACCCACGCAATTGGCAGT
<b>Kinase Domain Sequence:</b>	>SC323654 kinase domain raw sequence. By performing <a href="#">BLASTX</a> analysis with this sequence against NCBI reference protein database, you can confirm the presence of the kinase-deficient mutation CMKTGAGAAAYGCAGACAAGAAATGCTTTTTGGGTTTCATCATCTTCATCAAGAAGAAATCTGGGGAGG TATGTTGGGATGGACTATAAGGAGCAGAAGGGGCTCTGGCACCCTTCACTGATGTGGAGCGGCAGATGA CCGCACAGCACTATGTGACAGAATTTAACAAGAGACTCTATGAACAAAACATTCCCACCCAGATATTCTA CATCCCATCCACAATACTACTGATTTTAGAGGACAAGACAATAAA
<b>Restriction Sites:</b>	Please inquire
<b>ACCN:</b>	NM_025144
<b>Insert Size:</b>	5100 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." <a href="#">Cell, 2008 May p536-548.</a>
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_025144.2</a> , <a href="#">NP_079420.2</a>
<b>RefSeq Size:</b>	4281 bp

<b>RefSeq ORF:</b>	3735 bp
<b>Locus ID:</b>	80216
<b>UniProt ID:</b>	<u><a href="#">Q96QP1</a></u>
<b>Cytogenetics:</b>	4q25
<b>Domains:</b>	MHCK_EF2_kinase
<b>Protein Families:</b>	Druggable Genome, Protein Kinase
<b>Gene Summary:</b>	<p>This gene encodes an alpha kinase. Mice which were homozygous for disrupted copies of this gene exhibited coordination defects (PMID: 21208416). Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]</p> <p>Transcript Variant: This variant (1) represents the longest transcript. Variants 1 and 2 encode the same protein (isoform 1).</p>