

## Product datasheet for **MC206055**

### **Akt1 (BC066018) Mouse Untagged Clone**

#### **Product data:**

|                           |                                      |
|---------------------------|--------------------------------------|
| Product Type:             | Expression Plasmids                  |
| Product Name:             | Akt1 (BC066018) Mouse Untagged Clone |
| Tag:                      | Tag Free                             |
| Symbol:                   | Akt1                                 |
| Synonyms:                 | Akt, PKB/Akt, PKBalpha, PKB          |
| Mammalian Cell Selection: | Neomycin                             |
| Vector:                   | PCMV6-Kan/Neo (PCMV6KN)              |
| E. coli Selection:        | Kanamycin (25 ug/mL)                 |



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**Fully Sequenced ORF:** >BC066018  
 GCGGGGCGGGGAGAAGGCGGGCCGGCGGGCGGGCGGCAGCACCCAGTCCGGCGGGCGGGCCAGCGC  
 GGCAGCGCACGCGAGTCCGGGACCAGCGGAGCGGACCGAGCAGCGTCCTGTGGCCGGCACCGCGGGCC  
 CAGATCCGGCCAGCAGCGCGCGCCCGGACGCCGCTGCCTTCAGCCGGCCCCGCCAGCGCCCCCGCGG  
 GATGCGGAGCGGGCGGGCGCCGAGGCGCGGGCCGGCTAGGCCAGTCGCCCCACGCGGGCGGGCCGACG  
 CTGCGGCCAGGCCGGCTGGGCTCAGCCTACCGAGAAGAGACTCTGAGCATCATCCCTGGTTACCCCTGT  
 CTCTGGGGGCCACGGATACCATGAACGACGTAGCCATTGTGAAGGAGGGCTGGTCGACAACACGAGGGGA  
 ATATATTA AAAACCTGGCGGCCACGCTACTTCTCTCAAGAACGATGGCACCTTTATTGGCTACAAGGAA  
 CGGCTCAGGATGTGGATCAGCGAGAGTCCCCACTCAACAACCTTCTCAGTGGCACAAATGCCAGTGATGA  
 AGACAGAGCGGCAAGGCCAACACCTTATCATCCGCTGCCTGCAGTGGACCACAGTATTGAGCGCAC  
 CTTCCATGTGAAACGCCTGAGGAGCGGGAAGAATGGGCCACCGCATTGAGACTGTGGCAGATGGACTC  
 AAGAGGCAGGAAGAAGAGACGATGGACTCCGATCAGGCTCACCCAGTGACAACCTAGGGGCTGAAGAGA  
 TGGAGGTGCCCTGGCCAAGCCCAAGCACCGTGTGACCATGAACGAGTTTGTAGTACCTGAAGCTACTGGG  
 CAAGGGCACCTTTGGGAAGTGATTCTGGTGAAGAGAAGGCCACAGGCCGCTACTATGCCATGAAGATC  
 CTAAGAAGGAGTTCATCGTCCGAAGGATGAGGTTGCCACACGCTTACTGAGAACCGTGTCTGCAGAA  
 ACTCTAGGCATCCCTTCCCTACGGCCCTCAAGTACTATTCCAGACCCAGGACCGCTCTGCTTTGTCAT  
 GGAGTATGCCAACGGGGCGAGCTTCTTCCACCTGTCTCGAGAGCGTGTGTTCTCCGAGGACCGGGCC  
 CGCTTCTATGGTGCAGGATTGTGTCTGCCCTGGACTACTTGCCTCCGAGAAGAACGTGGTGTACCGGG  
 ACCTGAAGCTGGAGAACCTCATGCTGGACAAGGACGGGCACATCAAGATAACGGACTTCCGGCTGTGCAA  
 GGAGGGGATCAAGGACGGTGCCTACTATGAAGACATTCTGCGGAACGCCGGAGTACCTGGCCCCTGAGGTG  
 CTGGAGGACAACGACTACGGCCGTGCAGTGGACTGGTGGGGGCTGGGCGTGGTATGTACGAGATGATGT  
 GTGGCCGCTGCCCTTCTACAACCAGGACCACGAGAAGCTGTTTCGAGCTGATCCTCATGGAGGAGATCCG  
 GTTCCCGGCACACTCGGCCCTGAGGCCAAGTCCCTGCTCTCCGGGCTGCTCAAGAAGGACCCATCACAG  
 AGGCTCGGTGGGGCTCCGAGGATGCCAAGGAGATCATGCAGCACCGGTTCTTTGCCAACATCGTGTGGC  
 AGGATGTGTATGAGAAGAAGCTGAGCCACCTTCAAGCCCAAGTCCACCTCTGAGACTGACACCAGGTA  
 TTTTCGATGAGGAGTTCACAGCTCAGATGATCACCATCACGCCGCTGATCAAGATGACAGCATGGAGTGT  
 GTGGACAGTGAGCGGAGGCCGCACTTCCCCAGTTCTCTACTCAGCCAGTGGCACAGCCTGAGGCCTGG  
 GGCAGCGGCTGGCAGCTCCACGCTCCTCTGCATTGCCGAGTCCAGAAGCCCCGCATGGATCATCTGAACC  
 TGATGTTTTGTTCTCGGATGCGCTGGGAGGAACCTTGCAGCCTCCAGGACCAGGGGAGGATGTTTCT  
 ACTGTGGGCAGCAGCCTACCTCCAGCCAGGTGAGGAGGAAAATATCCTGGGGTTTTTCTTAATTTATT  
 TCATCCAGTTTGTAGACCACATGTGGCCTCAGTCCCCAGAACAATTAGATTTCATGTAGAAAATATTAA  
 GACTGACGCGACCATGTGCAATGTGGGCTCATGGGTCTGGGTGGTCCCGTCACTGCCCCATTGGCCT  
 GTCCACCTGGCCGCCACCTGTCTTAGGGTCCAGGGCCAAAGTCCAGCAAGAAGGCACCAGAAGCACCC  
 CCCTGTGGTATGCTAACTGGCCCTCTCCCTCTGGGCGGGGAGAGGTACACAGCTGCTTCAGCCCTAGGGCT  
 GGATGGGATGGCCAGGGCTCAAGTGAGGTTGACAGAGGAACAAGAATCCAGTTTGTGTGTGCCATG  
 CTGTTACAGAGACATTTAGGGGATTTAATCTTGGTGACAGGAGAGCCCTGCCCTCCCGCACCCGCTCCC  
 GCGTGGTGGCTCTTAGCGGGTACCCTGGGAGCGCTGCCTCACGTGAGCCCTTCTCTAGCACTTGTCTT  
 TTAGATGCTTTCCCTCTCCCGTGTCCGTACCCTGGCCTGTCCCTCCCGCCAGACGCTGGCCATTG  
 CTGCACCATGTGCTTTTTTACAACATTCAGCTTCAGCATTTTTACTATTATAATAAGAACTGTCCCTCC  
 AAATTC AATAAAAATTGCTTTTCAAAAAAAAAAAAAAAAAAAAA

**Restriction Sites:** Ascl-NotI

**ACCN:** BC066018

**Insert Size:** 1443 bp

**OTI Disclaimer:** 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>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>                | <u><a href="#">BC066018</a></u> , <u><a href="#">AAH66018</a></u>   |
| <b>RefSeq Size:</b>           | 2701 bp   |
| <b>RefSeq ORF:</b>            | 1443 bp   |
| <b>Locus ID:</b>              | 11651   |
| <b>Cytogenetics:</b>          | 12 61.2 cM  |
| <b>Gene Summary:</b>          | <p>This gene encodes the founding member of the Akt serine-threonine protein kinase gene family that also includes Akt2 and Akt3. This kinase is a major downstream effector of the phosphatidylinositol 3-kinase (PI3K) pathway that mediates the effects of various growth factors such as platelet-derived growth factor (PDGF), epidermal growth factor (EGF), insulin and insulin-like growth factor I (IGF-I). It is activated through recruitment to cellular membranes by PI3K lipid products and by phosphorylation by 3-phosphoinositide dependent kinase-1. It then further phosphorylates different downstream proteins in response to various extracellular signals and thus plays a pivotal role in mediating a variety of cellular processes, such as glucose metabolism, glycogen biosynthesis, protein synthesis and turn over, inflammatory response, cell survival (anti-apoptosis) and development. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2009]</p> |