

## Product datasheet for **RG217733**

### **AKT2 (NM\_001626) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	AKT2 (NM_001626) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	AKT2
Synonyms:	HIHGHH; PKBB; PKBBETA; PRKBB; RAC-BETA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG217733 representing NM\_001626  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAATGAGGTGTCTGTATCAAAAGAAGGCTGGCTCCACAAGCGTGGTGAATACATCAAGACCTGGAGGC  
 CACGGTACTTCTGCTGAAGAGCGACGGCTCCTTCATTGGGTACAAGGAGAGGCCCGAGGCCCTGATCA  
 GACTCTACCCCTTAAACAACCTTCTCCGTAGCAGAATGCCAGCTGATGAAGACCGAGAGGCCGCGACCC  
 AACACCTTTGTACATCGCTGCCTGCAGTGGACCACAGTATCGAGAGGACCTTCCACGTGGATTCTCCAG  
 ACGAGAGGGAGGAGTGGATGCGGGCCATCCAGATGGTCCGAACAGCCTCAAGCAGCGGGCCCCAGGCGA  
 GGACCCCATGGACTACAAGTGTGGCTCCCCAGTACTCCTCCACGACTGAGGAGATGGAAGTGGCGGTC  
 AGCAAGGCACGGGCTAAAGTGACCATGAATGACTTCGACTATCTCAAACCTCTTGCAAGGGAACCTTTG  
 GCAGAGTCATCCTGGTGGGAGGAGGACTGGCCGCTACTACGCCATGAAGATCCTGCGGAAGGAAGT  
 CATCATTGCCAAGGATGAAGTCGCTCACACAGTACCGAGAGCCGGTCTCCAGAACACCGGCACCCG  
 TTCTCCTACTGCGCTGAAGTATGCCTTCCAGACCCACGACCGCCTGTGCTTTGTGATGGAGTATGCCAACG  
 GGGGTGAGCTGTTCTTCCACCTGTCCCGGAGCGTGTCTTACAGAGGAGCGGGCCCGTTTTATGGTGC  
 AGAGATTGTCTCGGCTCTTGAGTACTTGCCTCGCGGGACGTGGTATACCGCGACATCAAGCTGGAAAAC  
 CTCATGCTGGACAAAGATGGCCACATCAAGTACTGACTTTGGCCTCTGCAAAGAGGGCATCAGTGACG  
 GGGCCACCATGAAAACCTTCTGTGGGACCCGGAGTACCTGGCGCCTGAGGTGCTGGAGGACAATGACTA  
 TGGCCGGGCGGTGGACTGGTGGGGGCTGGTGTGGTCAGTACGAGATGATGTGCGGCGCCTGCCTTC  
 TACAACAGGACACGAGCGCTCTTCGAGTCACTCCTCATGGAAGAGATCCGCTTCCCGCAGCAGTCA  
 GCCCGAGGCAAGTCCCTGCTTGGTGGGCTGCTTAAGAAGGACCCCAAGCAGAGGCTTGGTGGGGGCG  
 CAGCGATGCCAAGGAGGTCATGGAGCACAGGTTCTTCTCAGCATCAACTGGCAGGACGTGGTCCAGAAG  
 AAGCTCCTGCCACCTTCAAACCTCAGGTCACGTCGAGGTCGACACAAGGTAATTCGATGATGAATTTA  
 CCGCCAGTCCATCAATCACACCCCTGACCGCTATGACAGCCTGGGCTTACTGGAGCTGGACCAGCG  
 GACCCACTTCCCGAGTCTCCTACTCGGCCAGCATCCGCGAG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>RG217733 representing NM\_001626  
 Red=Cloning site Green=Tags(s)

MNEVSVIKGWLHKRGEYIKTWRPRYFLLKSDGSFIGYKERPEAPDQTLPLNFSVAECQLMKTERPRP  
 NTFVIRCLQWTTVIERTFHVDSNDEREEMRAIQMVANSLKQRAPGEDPMDYKCGSPSDSSTTEEMEVAV  
 SKARAKVTMNDFDYLKLLGKGTFRVILVREKATGRYYAMKILRKEVIIAKDEVAHTVTESRVLQNRHP  
 FLTALKYAFQTHDRLCFVMEYANGGELFFHL SRERVFTEERARFYGAEIVSALEYLHSRDVVYRDIKLEN  
 LMLDKDGHKIDTDFGLCKEGISDGATMKTFCGTPEYLAPEVLEDNDYGRAVDWGLGVVMEYEMMCGRLPF  
 YNQDHERLFELILMEEIRFPRTL SPEAKSLLAGLLKDPKQRLGGGSDAKEVMEHRFFLSINWQDVVQK  
 KLLPPFPQVTSEVDTRYFDDEFTAQSITITPPDRYDSLGLLELDQRTHFPQFSYSASIRE

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

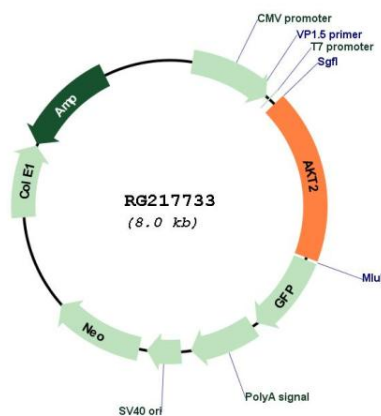
Sgfl-MluI



**RefSeq:** [NM\\_001626.2, NP\\_001617.1](#)  
**RefSeq Size:** 1715 bp  
**RefSeq ORF:** 1446 bp  
**Locus ID:** 208  
**UniProt ID:** [P31751](#)  
**Cytogenetics:** 19q13.2  
**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase  
**Protein Pathways:** Acute myeloid leukemia, Adipocytokine signaling pathway, Apoptosis, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Glioma, Insulin signaling pathway, Jak-STAT signaling pathway, MAPK signaling pathway, Melanoma, mTOR signaling pathway, Neurotrophin signaling pathway, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Progesterone-mediated oocyte maturation, Prostate cancer, Renal cell carcinoma, Small cell lung cancer, T cell receptor signaling pathway, Tight junction, Toll-like receptor signaling pathway, VEGF signaling pathway

**Gene Summary:** This gene is a putative oncogene encoding a protein belonging to a subfamily of serine/threonine kinases containing SH2-like (Src homology 2-like) domains, which is involved in signaling pathways. The gene serves as an oncogene in the tumorigenesis of cancer cells. For example, its overexpression contributes to the malignant phenotype of a subset of human ductal pancreatic cancers. The encoded protein is a general protein kinase capable of phosphorylating several known proteins, and has also been implicated in insulin signaling. [provided by RefSeq, Nov 2019]

### Product images:



Circular map for RG217733