

## Product datasheet for **SC125929**

### **KAT2A (NM\_021078) Human Untagged Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** KAT2A (NM\_021078) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** KAT2A  
**Synonyms:** GCN5; GCN5L2; hGCN5; PCAF-b  
**Mammalian Cell Selection:** None  
**Vector:** pCMV6-XL5  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**Fully Sequenced ORF:** >OriGene sequence for NM\_021078 edited

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CCACGCGTCCGGGGCTGGGAGCGCGGCCGCTCTCCGCTGCGGGGGAGGCCATGGCCGA
ACCTTCCCAGGCCCGACCCCGCCCGGCTGCGCAGCCCGGCCCTTTCAGTCCCCAGC
CCCTGCCCAACTCCGACTCCTGCACCCAGCCCGGCTTTCAGCCCGATTCCGACTCCAC
CCCGGCACCGCCCTGCCCCAGCTGCAGCCCGCCGCGCAGCACAGGGACTGGGGGGCC
CGGGGTAGGAAGTGGGGGGCCGGGAGCGGGGGGATCCGGCTCGACCTGGCCTGAGCCA
GCAGCAGCGCCAGTCAGAGGAAGGCGCAAGTCCGGGGCTGCCGCGCCCAAGAAGCT
TGAGAAGTAGGGGTCTTCTCGGCTTGCAAGGCAATGAAACCTGTAAGTGAATGGCTG
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TGTGTCAGAGGATGAGATAAACCAGCTGCTGGGGATGGTGGTGGATGTGGAGAATCTCTT
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GCTACTGCGAAATGCATCCTGCAGATGACCCGGCCTGTGGTGGAGGGTCCCTGGGCAG
CCCTCCATTTGAGAAACCTAATATTGAGCAGGGTGTGCTGAACTTTGTGCAGTACAAGTT
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CTCAGAGGGGACACAGCTGGTTCCCGCCAGCTTCAGTCAGTGCAGCGTTGTTCCAG
CACCCCATCTTCAGCCCCAGCATGGGTGGGGCAGCAACAGCTCCCTGAGTCTGGATTC
TGCAGGGGCCGAGCCTATGCCAGGCGAGAAGAGGACGCTCCAGAGAACCTGACCCTGGA
GGATGCCAAGCGGCTCCGTGTGATGGGTGACATCCCCATGGAGCTGGTCAATGAGGTCAT
GCTGACCATCACTGACCCTGCTGCCATGCTGGGGCTGAGACGAGCCTGCTTTCGGCCAA
TGCGGCCCGGGATGAGACAGCCCGCTGGAGGAGCGCCGGCCTCATCGAGTTCATGT
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CATCGGCAACTACTGACGCCCAAGGCCAACCGCGGGTGTGCTGTGGCTCGTGGGGCT  
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 CTTTGACCCGAAGCACAAGACTCTGGCCTTGATCAAGGATGGGCGGGTCAATCGGTGGCAT  
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 GAATGAGCAGGTCAAGGGTTATGGGACCCACCTGATGAACCACCTGAAGGAGTATCACAT  
 CAAGCACAACTTCTCTACTTCTCACCTACGCCGACGAGTACGCCATCGGCTACTTCAA  
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 CTGCAGCTCTTTCTGGACCTTACGGCACCCCAAGCGTGCAGCTCTGTCCAGCCTTAC  
 TGTGTGTGAGAGGTCTCCTGGGTGGGGCCAGCCCTTAGAGTAGCTGGTGGCCAGGG  
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 TGAGTGTGGCTTCAAGGGTTGGAAGTTAGCCCAAAGTGAAGGGGGCCATGCCTTGTCC  
 AGCACTGTTCTGTGAGTCTCCCCAGGGGTGGGGGTATGGGACCATTATTCCCTGGC  
 ATTAATCCCTTAGAGGGAATAATAAAGCTTTTTATTTCTGTGAAAAAAAAAAAAA

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_021078 unedited  
 GGTTAGGATTTGTATACGACTTACTATAGGCGGCCGCGATTGATCTGGTACCGTCC  
 GGAATCCCGGGATATCGTCGACCCACGCGTCCGGGGCTGGGAGCGCGCGCCGCTCTCC  
 GCTGCGGGGAGGCCATGGCGGAACCTTCCAGGCCCGACCCCGGCCCGGCTGCGCAG  
 CCCCAGCCCTTCAAGTCCCCAGCCCTGCCCAACTCCGACTCCTGCACCCAGCCCGGT  
 TCAGCCCCGATTCCGACTCCCACCCGGCACCCAGCCCTGCCAGCTGCAGCCCCAGCC  
 GGCAGCACAGGGACTGGGGGGCCGGGTAGGAAGTGGGGGGCCGGGAGCGGGGGGAT  
 CCGGCTCGACCTGGCCTGAGCCAGCAGCAGCGCCAGTCAAGGAAGGCGCAAGTCCGG  
 GGGCTGCCGCGCCAAGAAGCTTGAGAAGCTAGGGTCTTCTCGGCTTGAAGGCCAAT  
 GAAACCTGTAAGTGAATGGCTGGAAAAACCCCAAGCCCCCACTGCACCCCGCATGGAT  
 CTGCAGCAGCCAGCTGCCAACCTGAGTGTGCTGTGCCGAGTTGTGAGCACCCCTTGGCT  
 GACCACGTATCCCACTTGGAGAATGTGTGAGAGGATGAGATAAACCGACTGCTGGGGATG  
 GTGGTGGATGTGGAGAATCTTTCATGTCTGTTACAGGAAGAGGACACAGACACCAAGC  
 AGGTCTATTTCTACCTCTTCAAGCTACTGCGGAAATGCATCCTGCAGATGACCCGGCCTG  
 TGGTGGAGGGTCCCTGGCAGCCCTCCTTTTGAACCAATATTGAGCAGGGTGTGCT  
 GAACCTTGGGCCAGACAGGTTAGTACCTGGCCTCCCGGAAGCGGCANACATGTTCCAGC  
 CTCTAAAAGTTCTTGTCTGCCTA

**Restriction Sites:**

Please inquire

**ACCN:**

NM\_021078

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**Components:** 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).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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.

**RefSeq:** [NM\\_021078.1](#), [NP\\_066564.1](#)

**RefSeq Size:** 3074 bp

**RefSeq ORF:** 2514 bp

**Locus ID:** 2648

**UniProt ID:** [Q92830](#)

**Cytogenetics:** 17q21.2

**Protein Families:** Transcription Factors

**Protein Pathways:** Notch signaling pathway

**Gene Summary:** KAT2A, or GCN5, is a histone acetyltransferase (HAT) that functions primarily as a transcriptional activator. It also functions as a repressor of NF-kappa-B (see MIM 164011) by promoting ubiquitination of the NF-kappa-B subunit RELA (MIM 164014) in a HAT-independent manner (Mao et al., 2009 [PubMed 19339690]).[supplied by OMIM, Sep 2009]