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Product datasheet for MC227672

Kat5 (NM_001199249) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Kat5 (NM_001199249) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Kat5
Synonyms:	AI839539; CPLA2; Htatip; Htatip1; PLIP; Tip55; Tip60
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>MC227672 representing NM_001199249
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGAGGTGGTGAGTCCGGTGCCCGGGGCGGGGCGGAGGGAGCCAGGGGAGGTGGGTAGAGCCCGAG
GCCCCCCAGTAGCCGACCCTGGCGCCGCGCTGTCTCCCCAGGGGGAGATAATCGAGGGCTGCCGCCTGCC
CGTGCTGCGGCGCAACCAGGACAACGAAGATGAGTGGCCCCTGGCTGAGATCCTGAGCGTGAAGGACATC
AGTGGCCGAAAGCTTTTCTATGTCCATTACATTGACTTCAACAAACGTCTGGATGAATGGGTGACTCACG
AGCGGCTGGACTTAAAGAAGATCCAATTTCCCAAGAAAGAGGCCAAGACACCTACCAAGAACGGACTTCC
TGGGTCCCGCCCCGGCTCTCCCGAAAGAGAGGTGAAACGGAAGGTGGAGGTGGTTTCACCAGCAACCCCA
GTGCCCAGCGAGACAGCCCCAGCCTCGGTTTTCCCTCAGAATGGGTCAGCCCGTAGGGCAGTGGCAGCCC
AGCCTGGACGGAAGCGGAAATCTAATTGCTTGGGCACTGATGAGGATTCTCAGGACAGCTCAGATGGAAT
ACCGTCAGCACCACGAATGACTGGCAGTCTGGTGTCTGACCGGAGCCACGACGACATTGTCACCCGGATG
AAGAACATTGAGTGTATTGAGCTTGGCCGGCACCGCCTCAAGCCGTGGTACTTCTCCCCGTACCCACAAG
AGCTTACCACGCTACCCGTCCTCTACCTGTGCGAATTTTGCCTCAAATATGGCCGTAGCCTCAAGTGTCT
GCAACGCCACTTGACCAAATGTGATCTTCGGCACCCTCCAGGCAATGAAATTTACCGCAAGGGCACCATC
TCCTTTTTTGAGATTGATGGACGGAAAAACAAGAGTTACTCACAAAACCTGTGTCTTCTGGCCAAGTGTT
TCCTGGACCACAAAACACTGTACTATGACACTGACCCCTTCCTCTTCTACGTAATGACGGAGTATGACTG
CAAAGGTTTCCACATCGTGGGCTACTTCTCCAAGGAAAAGGAATCCACAGAAGATTACAATGTGGCCTGC
ATCTTGACTCTGCCTCCCTACCAGCGCCGGGGCTATGGCAAGCTGCTTATTGAGTTCAGTGAGTATGTGC
TGCCTGACCAGGAGCTGGCAGGCCAAGCCTGTGTGGGTGTACCCTCATCTGTGCTTCACATGCAGACAAC
CCAGTCACCAGGAGAGCCGCCAGAAATAAAGGAGACTCTACCAAGGTCCTTTCCTCAGTTGACTGCCCTG
TTTCCTGGAGTAGGTTCCAGCATCTACTTTGCCTTTGGCTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001199249

Insert Size: 1302 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).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001199249.1, NP_001186178.1
RefSeq Size:	1423 bp
RefSeq ORF:	1302 bp
Locus ID:	81601
Cytogenetics:	19 A
Gene Summary:	Catalytic subunit of the NuA4 histone acetyltransferase complex which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A (By similarity). This modification may both alter nucleosome-DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription (By similarity). This complex may be required for the activation of transcriptional programs associated with oncogene and proto-oncogene mediated growth induction, tumor suppressor mediated growth arrest and replicative senescence, apoptosis, and DNA repair (By similarity). NuA4 may also play a direct role in DNA repair when recruited to sites of DNA damage (By similarity). Component of a SWR1-like complex that specifically mediates the removal of histone H2A.Z/H2AFZ from the nucleosome (By similarity). Also acetylates non-histone proteins, such as ATM, NR1D2, RAN, FOXP3, ULK1 and RUBCNL/Pacer (PubMed:22539723). Directly acetylates and activates ATM. Relieves NR1D2-mediated inhibition of APOC3 expression by acetylating NR1D2 (By similarity). Promotes FOXP3 acetylation and positively regulates its transcriptional repressor activity. Acetylates RAN at 'Lys-134' (By similarity). Together with GSK3 (GSK3A or GSK3B), acts as a regulator of autophagy: phosphorylated at Ser-86 by GSK3 under starvation conditions, leading to activate acetyltransferase activity and promote acetylation of key autophagy regulators, such as ULK1 and RUBCNL/Pacer (PubMed:22539723).[UniProtKB/Swiss-Prot Function] Transcript Variant: This variant (4) has multiple differences in the 5' and 3' coding regions, compared to variant 1. It encodes a shorter isoform (4, also known as delta) with a unique C-terminus, compared to isoform 1.