# Recombinant Human Histone acetyltransferase KAT5 (KAT5), partial

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| **Product Code** | CSB-EP835717HU1 |
| **Relevance** | 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. This modification may both alter nucleosome-DNA interactions and promote interaction of the modified histones with other proteins which positively regulate transcription. 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. NuA4 may also play a direct role in DNA repair when recruited to sites of DNA damage. Directly acetylates and activates ATM. Component of a SWR1-like complex that specifically mediates the roval of histone H2A.Z/H2AFZ from the nucleosome. In case of HIV-1 infection, interaction with the viral Tat protein leads to KAT5 polyubiquitination and targets it to degradation. Relieves NR1D2-mediated inhibition of APOC3 expression by acetylating NR1D2. Promotes FOXP3 acetylation and positively regulates its transcriptional repressor activity |
| **Abbreviation** | Recombinant Human KAT5 protein, partial |
| **Storage** | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |
| **Uniprot No.** | Q92993 |
| **Alias** | 60 kDa Tat-interactive protein ;Tip60Histone acetyltransferase HTATIP ;HIV-1 Tat interactive protein;Lysine acetyltransferase 5cPLA(2)-interacting protein |
| **Product Type** | Recombinant Protein |
| **Immunogen Species** | Homo sapiens (Human) |
| **Purity** | Greater than 90% as determined by SDS-PAGE. |
| **Sequence** | EVGEIIEGCRLPVLRRNQDNEDEWPLAEILSVKDISGRKLFYVHYIDFNKRLDE WVTHERLDLKKIQFPKKEAKTPTKNGLPGSRPGSPEREVPASAQASGKTLPIP VQITLRFNLPKEREAIPGGEPDQPLSSSSCLQPNHRSTKRKVEVVSPATPVPS ETAPASVFPQNGAARRAVAAQPGRKRKSNCLGTDEDSQDSSDGIPSAPRMT GSLVSDRSHDDIVTRMKNIECIELGRHRLKPWYFSPYPQELTTLPVLYLCEFCL KYGRSLKCLQRHLTKCDLRHPPGNEIYRKGTISFFEIDGRKNKSYSQNLCLLAK CFLDHKTLYYDTDPFLFYVMTEYDCKGFHIVGYFSKEKESTEDYNVACILTLPP YQRRGYGKLLIEFSYELSKVEGKTGTPEKPLSDLGLLSYRSYWSQTILEILMGL KSESGERPQITINEISEITSIKKEDVISTLQYLNLINYYKGQYILTLSEDIVDGHERA MLKRLLRIDSKCLHFTPKDWSKRGKW |
| **Research Area** | Immunology |

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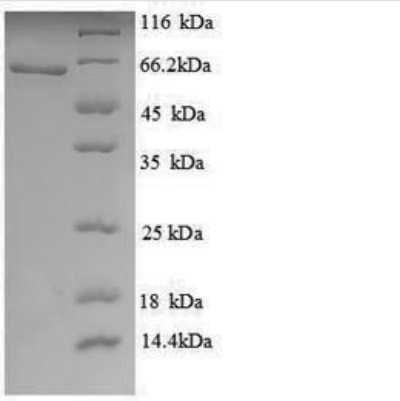
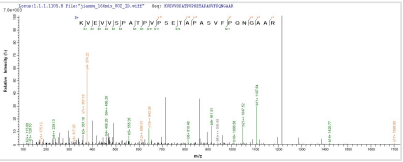
| **Source** | E.coli |
| **Target Names** | KAT5 |
| **Expression Region** | 3-513aa |
| **Notes** | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| **Tag Info** | N-terminal 6xHis-tagged |
| **Mol. Weight** | 62.4kDa |
| **Protein Length** | Partial |

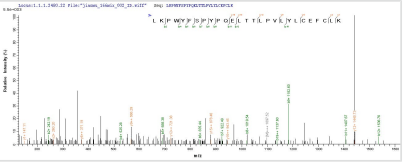
**Image**




(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-RP178494h could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) KAT5.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-RP178494h could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) KAT5.

**Description**

To prepare this Recombinant Human KAT5 protein, the recombinant DNA was required, which was generated by fusing the KAT5 gene with N-terminal 6xHis tag sequence. Once the recombinant DNA was amplified and purified, a protein expression system, E.coli, was needed for this KAT5 protein production. After purification, a premium KAT5 recombinant proteinwas obtained. According to SDS-PAGE, its purity turns out to be 90%+.

KAT5 (also called HTATIP or TIP60) is a gene encoding a protein named histone acetyltransferase KAT5 or 60 kDa Tat-interactive protein (short name is Tip60). The protein encoded by this gene belongs to a member of MYST acetyltransferase family and is an important component of an evolutionarily conserved complex, NuA4. KAT5 protein has been discovered multiple functions as transcriptional regulation factor together with or without nuclear receptors,

such as activating or inhibiting downstreamgene expression; or acetylating a series of proteins to regulate their activities and stability.

**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.
Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.