

KMT2C recombinant protein

Recombinant KMT2C (MLL3) complex

CATALOG # AAA59708	HOST E Coli
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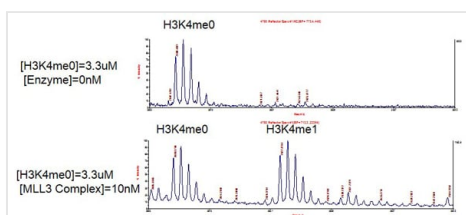
PRODUCT SYNONYMS

KMT2C; Recombinant KMT2C (MLL3) complex; HALR; KMT2C recombinant protein

PRODUCT SPECIFICATIONS

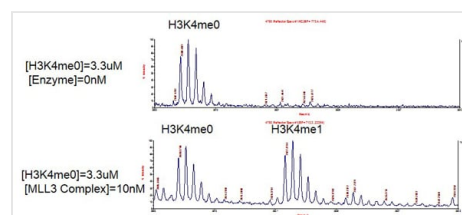
Host	E Coli
Purity/Purification	The recombinant protein is >90% pure by SDS-PAGE.
Form/Format	Full length Recombinant KMT2C (MLL3) complex expressed in E Coli cells and supplied in 25mM Tris pH8.0, 300mM NaCl, 5% Glycerol, 0.04% Triton X-100. Please refer to product insert upon arrival for lot-specific concentration.
Protein Species	Human
Tag	GST-Tag, His-Tag
Notes	Recombinant KMT2C (MLL3) complex is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. HMT Assay Conditions: 50mM TrisCl, pH 8.6, 0.02% Triton X-100, 2mM MgCl ₂ , 1mM TCEP, 100uM SAM, 10nm Recombinant KMT2C (MLL3) complex, 3.3uM H3 (1-21) peptide at 2 hours at room temperature.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



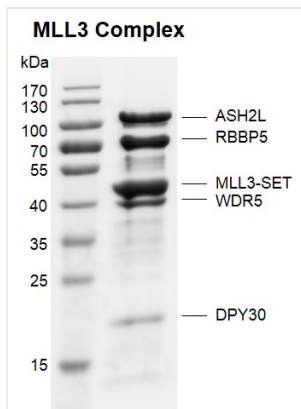
Application Data

Recombinant KMT2C (MLL3) complex activity assay. 3.3 uM H3K4me0 peptide was incubated with 10 nM Recombinant KMT2C (MLL3) complex in reaction buffer for 3 hours at room temperature. The reaction product was detected by MALDI-TOF. Single 3.3 uM H3K4me0 peptide was used as negative control. Catalytic Ability: ~165 turnovers/ enzyme molecule



Application Data

Recombinant KMT2C (MLL3) complex activity assay. 3.3 uM H3K4me0 (1-21aa) peptide was incubated with Recombinant KMT2C (MLL3) complex in reaction buffer for 3 hour at room temperature. Recombinant KMT2C (MLL3) complex was used in a HTRF assay to determine enzyme linearity. Methylated peptide (H3K4me2) was measured using H3K4me2-specific antibody.



SDS-PAGE

Recombinant KMT2C (MLL3) complex protein gel. Recombinant KMT2C (MLL3) complex run on an SDS-PAGE gel and stained with Coomassie Blue.

ADDITIONAL INFORMATION

Related Product Information for KMT2C recombinant protein	Short Description: Recombinant KMT2C (MLL3) complex (MLL3/WDR5/ASH2L/RBBP5/DPY30) was generated using a peptide corresponding to amino acids 4740-4911 (accession number NP_733751.2) of the KMT2C protein that was expressed in E Coli. Recombinant KMT2C (MLL3) complex contains an N-terminal GST-Tag with a molecular weight of 46 kDa; human WDR5 (accession number NM_017588) that contains an N-terminal His-Tag with a molecular weight of 35 kDa; human ASH2L (accession number NM_001105214) that contains an N-terminal His-Tag with a molecular weight of 61 kDa; human RBBP5 (accession number NM_005057) that contains an N-terminal His-Tag with a molecular weight of 60 kDa; and human DPY30 (accession number NM_032574) that contains an N-terminal His-Tag with a molecular weight of 12 kDa. All Recombinant MLL3/WDR5/ASH2L/RBBP5/DPY30 complex proteins were individually expressed in an E Coli expression system. The recombinant protein is >90% pure by SDS-PAGE. It is suitable for use in the study of enzyme kinetics, inhibitor screening, and selectivity profiling. Background: The KMT2C (MLL3) complex (MLL3/WDR5/ASH2L/RBBP5/DPY30), also known as the MLL3 WARD Complex is a histone methyltransferase that, like MLLs 1, 2 and 4, preferentially methylates the activating histone mark lysine 4 of histone H3 (H3K4). The KMT2C (also known as MLL3) subunit contains the catalytic SET domain that is responsible for substrate recognition and enzymatic activity, along with the WDR5 and RBBP5 interaction motifs necessary for assembly of the WARD complex. The MLL3 WARD complex forms part of the ASC-2/NCOA6 complex (ASCOM), which possesses histone methylation activity and is involved in transcriptional coactivation. The chromatin remodeling complex SWI/SNF also interacts with ASCOM through binding of the MLL3 (or MLL4) SET domain with the INI1 subunit of SWI/SNF. Knockdown of MLLs 3 and 4 expression results in a reduction of HOXC10, an estrogen-induced protein that is overexpressed in breast cancer.
Product Categories/Family for KMT2C recombinant protein	Recombinant Proteins ; Histone Methyltransferase (HMT)

NCBI AND UNIPROT INFORMATION

NCBI GI #	91718902
NCBI GeneID	58508
NCBI Accession #	NP_733751.2
NCBI GenBank Nucleotide #	NM_017588
UniProt Accession #	Q8NEZ4 ; Q8NC02 ; Q8NDF6 ; Q9H9P4 ; Q9NR13 ; Q9P222 ; Q9UDR7
Molecular Weight	541,370 Da
NCBI Official Full Name	histone-lysine N-methyltransferase 2C
NCBI Official Synonym Full Names	lysine (K)-specific methyltransferase 2C
NCBI Official Symbol	KMT2C

NCBI Official Synonym Symbols	HALR; MLL3
NCBI Protein Information	histone-lysine N-methyltransferase 2C; ALR-like protein; homologous to ALR protein; histone-lysine N-methyltransferase MLL3; myeloid/lymphoid or mixed-lineage leukemia protein 3; histone-lysine N-methyltransferase, H3 lysine-4 specific
UniProt Protein Name	Histone-lysine N-methyltransferase 2C
UniProt Gene Name	KMT2C
UniProt Synonym Gene Names	HALR; KIAA1506; MLL3; Lysine N-methyltransferase 2C

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/kmt2c-recombinant-protein-e-coli/59708>