

MLL2 active protein

MLL2 (KMT2D), Active

CATALOG # AAA73022	HOST Sf9 insect cells using baculovirus	APPLICATIONS Methyltransferase Assay
------------------------------	---	--

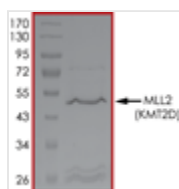
PRODUCT SYNONYMS

MLL2; MLL2 (KMT2D); Active; MLL2 active protein

PRODUCT SPECIFICATIONS

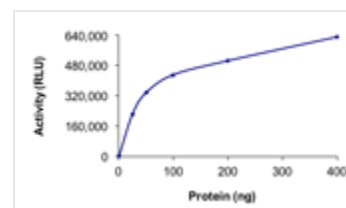
Host	Sf9 insect cells using baculovirus
Purity/Purification	>80%
Form/Format	50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Concentration	0.05 mg/ml (varies by lot)
Sequence Positions	5317-end
Sequence Length	19432
Applicable Applications for MLL2 active protein	Methyltransferase Assay
Species	Human
Specific Activity	2.5 nmol/min/mg
Tag	GST tag
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	Storage: Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. Shipping: Ships with dry ice. Stability: 1 year at -70°C from date of shipment.

IMAGES



Application Data

The purity of MLL2 (KMT2D) was determined to be >80% by densitometry, approx. MW 51kDa



Application Data

The specific activity of MLL2 (KMT2D) was determined to be 2.5 nmol/min/mg as per activity assay protocol.

ADDITIONAL INFORMATION

Related Product Information for MLL2 active protein	Description: Recombinant human MLL2 (5317-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag. Scientific Background: Histone-lysine N-methyltransferase 2D, also known as mixed-lineage leukemia 2 (MLL2), methylates 'Lys-4' of histone H3 (H3K4me). Acts as a coactivator for estrogen receptor by being recruited by ESR1, thereby activating transcription. MLL2/KMT2D is among the most frequently mutated genes in a variety of pediatric tumors.
Product Categories/Family for MLL2 active protein	Enzymes; Active Methyltransferases
References	1. Rao RC, et al: Hijacked in cancer: the KMT2 (MLL) family of methyltransferases. Nat Rev Cancer. 15 (6):334-46. 2015. 2. Huether R. et al: The landscape of somatic mutations in epigenetic regulators across 1,000 paediatric cancer genomes. Nat Commun 5: 3630. 2014. http://www.uniprot.org/uniprot/O14686

NCBI AND UNIPROT INFORMATION

NCBI GI #	148762968
NCBI GeneID	8085
NCBI Accession #	NM_003482.3
NCBI GenBank Nucleotide #	NM_003482
UniProt Accession #	O14686; O14687
Molecular Weight	51 kDa
NCBI Official Full Name	Homo sapiens lysine methyltransferase 2D (KMT2D), mRNA
NCBI Official Synonym Full Names	lysine methyltransferase 2D
NCBI Official Symbol	KMT2D
NCBI Official Synonym Symbols	ALR; KMS; MLL2; MLL4; AAD10; KABUK1; TNRC21; CAGL114
NCBI Protein Information	histone-lysine N-methyltransferase 2D
UniProt Protein Name	Histone-lysine N-methyltransferase 2D
UniProt Gene Name	KMT2D
UniProt Synonym Gene Names	ALR; MLL2; MLL4; Lysine N-methyltransferase 2D

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.