abcam

Product datasheet

Recombinant Human KMT2D / MLL2 protein ab152839

1 Image

Description

Product name	Recombinant Human KMT2D / MLL2 protein
Expression system	Wheat germ
Accession	O14686
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	SKLEGMFPAYLQEAFFGKELLDLSRKALFAVGVGRPSFG LGTPKAKGDGG SERKELPTSQKGDDGPDIADEESRGLEGKADTPGPEDG GVKASPVPSDPE
Predicted molecular weight	37 kDa including tags
Amino acids	1487 to 1586

Specifications

Our Abpromise guarantee covers the use of **ab152839** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	ELISA Western blot SDS-PAGE
Form	Liquid
Additional notes	

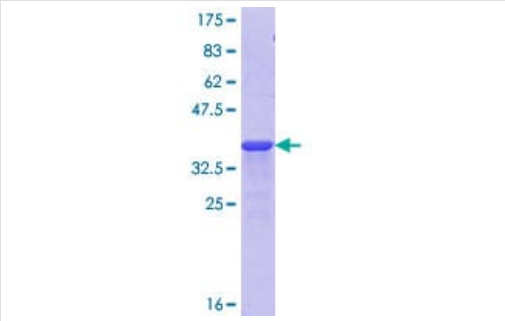
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl

General Info

Function	Histone methyltransferase. Methylates 'Lys-4' of histone H3 (H3K4me). H3K4me represents a specific tag for epigenetic transcriptional activation. Plays a central role in beta-globin locus transcription regulation by being recruited by NFE2. Acts as a coactivator for estrogen receptor by being recruited by ESR1, thereby activating transcription. Plays an important role in controlling bulk H3K4me during oocyte growth and preimplantation development. Required during the transcriptionally active period of oocyte growth for the establishment and/or maintenance of bulk H3K4 trimethylation (H3K4me3), global transcriptional silencing that preceeds resumption of meiosis, oocyte survival and normal zygotic genome activation.
Tissue specificity	Expressed in most adult tissues, including a variety of hematoipoietic cells, with the exception of the liver.
Involvement in disease	Defects in MLL2 are the cause of Kabuki syndrome (KABS) [MIM:147920]. It is a congenital mental retardation syndrome with additional features, including postnatal dwarfism, a peculiar facies characterized by long palpebral fissures with eversion of the lateral third of the lower eyelids, a broad and depressed nasal tip, large prominent earlobes, a cleft or high-arched palate, scoliosis, short fifth finger, persistence of fingerpads, radiographic abnormalities of the vertebrae, hands, and hip joints, and recurrent otitis media in infancy.
Sequence similarities	Belongs to the histone-lysine methyltransferase family. TRX/MLL subfamily. Contains 1 FY-rich C-terminal domain. Contains 1 FY-rich N-terminal domain. Contains 5 PHD-type zinc fingers. Contains 1 post-SET domain. Contains 4 RING-type zinc fingers. Contains 1 SET domain.
Domain	LXXLL motifs 5 and 6 are essential for the association with ESR1 nuclear receptor.
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
Cellular localization	Nucleus.

Images



SDS-PAGE - Recombinant Human KMT2D / MLL2 protein (ab152839)

12.5% SDS-PAGE analysis of ab152839 stained with Coomassie Blue.

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