

ARG54751 anti-KMT2E / MLL5 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes KMT2E / MLL5
Tested Reactivity	Hu
Predict Reactivity	Ms
Tested Application	WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	KMT2E / MLL5
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 93-120 (N-terminus) of Human MLL5 (NP_061152.3).
Conjugation	Un-conjugated
Alternate Names	Lysine N-methyltransferase 2E; NKp44L; EC 2.1.1.43; MLL5; Histone-lysine N-methyltransferase 2E; HDCMC04P; Myeloid/lymphoid or mixed-lineage leukemia protein 5

Application Instructions

Application table	Application	Dilution
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HL-60	

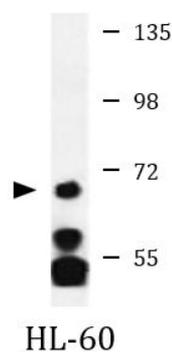
Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 55904 Human Swiss-port # Q8IZD2 Human
Gene Symbol	KMT2E
Gene Full Name	lysine (K)-specific methyltransferase 2E
Background	This gene is a member of the myeloid/lymphoid or mixed-lineage leukemia (MLL) family and encodes a protein with an N-terminal PHD zinc finger and a central SET domain. Overexpression of the protein inhibits cell cycle progression. Alternate transcriptional splice variants have been characterized. [provided by RefSeq, Jul 2008]
Function	Histone methyltransferase that specifically mono- and dimethylates 'Lys-4' of histone H3 (H3K4me1 and H3K4me2). H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation. Key regulator of hematopoiesis involved in terminal myeloid differentiation and in the regulation of hematopoietic stem cell (HSCs) self-renewal by a mechanism that involves DNA methylation. Plays an essential role in retinoic-acid-induced granulopoiesis by acting as a coactivator of RAR-alpha (RARA) in target gene promoters. Also acts as an important cell cycle regulator, participating in cell cycle regulatory network machinery at multiple cell cycle stages. Required to suppress inappropriate expression of S-phase-promoting genes and maintain expression of determination genes in quiescent cells. Overexpression inhibits cell cycle progression, while knockdown induces cell cycle arrest at both the G1 and G2/M phases. Isoform NKp44L: Cellular ligand for NCR2/NKp44, may play a role as a danger signal in cytotoxicity and NK-cell-mediated innate immunity. [UniProt]
Research Area	Cancer antibody; Developmental Biology antibody; Gene Regulation antibody
Calculated Mw	205 kDa
PTM	O-glycosylation at Thr-440 in the SET domain by OGT is essential for the histone methyltransferase and the coactivator activity toward RARA in granulopoiesis. The absence of Thr-440 glycosylation in assays done in vitro may explain why some authors did not detected any histone methyltransferase activity for this protein.
Cellular Localization	Nucleus speckle. Note=Absent from the nucleolus

Images



ARG54751 anti-KMT2E / MLL5 antibody WB image

Western blot: 35 µg of HL-60 cell lysate stained with ARG54751 anti-KMT2E / MLL5 antibody.