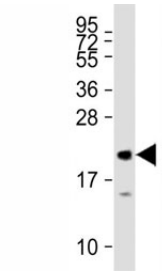
MLL2 Antibody / KMT2D (F53759)

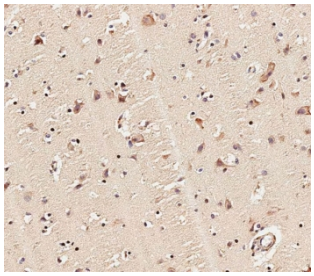
Catalog No.	Formulation	Size
F53759-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F53759-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	O14686
Applications	Western Blot : 1:500-1:1000 Immunohistochemistry (FFPE) : 1:250-1:500
Limitations	This MLL2 antibody is available for research use only.



Western blot testing of human recombinant MLL2 protein with MML2 antibody at 1:27000.



IHC staining of FFPE human brain tissue with MLL2 antibody. HIER: steam section in pH9 EDTA for 20 min and allow to cool prior to staining.

Description

The SET domain is a conserved C-terminal domain that characterizes proteins of the MLL family, including MLL2. The MLL SET domain is a histone H3 Lys4 (K4)-specific methyltransferase whose activity is stimulated with acetylated H3 peptides. The gene for MLL2 encodes a 5,262-amino acid protein containing a SET domain, 5 PHD fingers, potential zinc fingers, and a long run of glutamines interrupted by hydrophobic residues (mostly leucine). They also detected an alternatively spliced form encoding 4,957 amino acids and lacking an N-terminal zinc finger and PHD finger. By analysis of rodent/human hybrid cells and analysis of the Genebridge radiation hybrid panel, they mapped the gene to the 12p13.1-qter region. The 12q12-q13 region is involved in duplications and translocations associated with cancer. By database searching, Karlin et al. (2002) identified 192 human protein sequences that have multiple amino acid runs, many of which are associated with disease, including cancer. Karlin et al. (2002) found that a key aspect of 82 of these protein sequences is their role in transcription, translation, and developmental regulation. MLL2 is a striking example of proteins with multiple amino acid runs, with 22 glutamine runsGenes encoding a significant number of long amino acid runs are potentially associated with diseases, such as cancer.

Application Notes

Titration of the MLL2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 4980-5009 from the human protein was used as the immunogen for this MLL2 antibody.

Storage

Aliquot the MLL2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.