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RBBP5 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52860

Product Information

Application	WB, ICC
Primary Accession	Q15291
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Calculated MW	59153

Additional Information

Gene ID	5929
Other Names	RBBP 5; RBBP-5; RBBP5; RBBP5_HUMAN; RBQ 3; RBQ3; Retinoblastoma binding protein 5; Retinoblastoma binding protein RBQ3; Retinoblastoma binding protein5; Retinoblastoma-binding protein 5; Retinoblastoma-binding protein RBQ-3; SWD1; SWD1, Set1c WD40 repeat protein, homolog.
Dilution	WB~~1:1000 ICC~~1:100
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	RBBP5
Synonyms	RBQ3
Function	In embryonic stem (ES) cells, plays a crucial role in the differentiation potential, particularly along the neural lineage, regulating gene induction and H3 'Lys-4' methylation at key developmental loci, including that mediated by retinoic acid (By similarity). Does not affect ES cell self-renewal (By similarity). Component or associated component of some histone methyltransferase complexes which regulates transcription through recruitment of those complexes to gene promoters (PubMed:19131338). As part of the MLL1/MLL complex, involved in mono-, di- and trimethylation at 'Lys-4' of histone H3 (PubMed:19556245). Histone H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation (PubMed:19556245). In association with ASH2L and WDR5, stimulates the histone methyltransferase activities of

KMT2A, KMT2B, KMT2C, KMT2D, SETD1A and SETD1B (PubMed:21220120, PubMed:22266653).

Cellular Location Nucleus.

Tissue Location Ubiquitously expressed.

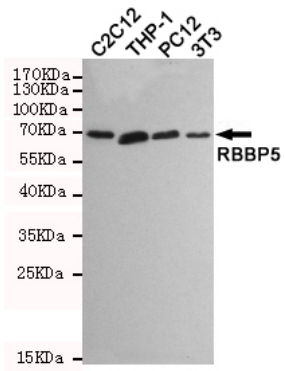
Background

In embryonic stem (ES) cells, plays a crucial role in the differentiation potential, particularly along the neural lineage, regulating gene induction and H3 'Lys-4' methylation at key developmental loci, including that mediated by retinoic acid (By similarity). As part of the MLL1/MLL complex, involved in mono-, di- and trimethylation at 'Lys-4' of histone H3. Histone H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation.

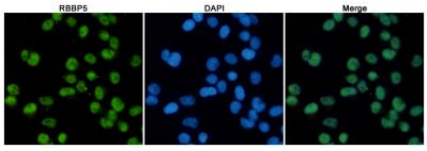
References

Saijo M.,et al.Genomics 27:511-519(1995).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Gregory S.G.,et al.Nature 441:315-321(2006).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Hughes C.M.,et al.Mol. Cell 13:587-597(2004).

Images



Western blot detection of RBBP5 in C2C12,THP-1,PC12 and 3T3 cell lysates using RBBP5 mouse mAb (1:1000 diluted).Predicted band size:70KDa.Observed band size:70KDa.



Immunofluorescent analysis of Hela cells fixed with 4% Paraformaldehyde and using anti-RBBP5 mouse mAb (dilution 1:100). DAPI was used to stain nucleus(blue).

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