

# RBBP5 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20943c

#### **Product Information**

**Application** WB, IF, E **Primary Accession** Q15291

**Reactivity** Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB51371
Calculated MW 59153

#### **Additional Information**

**Gene ID** 5929

Other Names Retinoblastoma-binding protein 5, RBBP-5, Retinoblastoma-binding protein

RBQ-3, RBBP5, RBQ3

Target/Specificity This RBBP5 antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 451-485 amino acids from the

C-terminal region of human RBBP5.

**Dilution** WB~~1:1000 IF~~1:25 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** RBBP5 Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

#### **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.

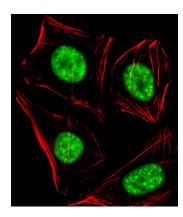
### **Background**

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

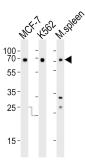
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Ota T.,et al.Nat. Genet. 36:40-45(2004).
Gregory S.G.,et al.Nature 441:315-321(2006).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Hughes C.M.,et al.Mol. Cell 13:587-597(2004).

## **Images**



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized U-2 OS (Human osteosarcoma cell line) cells labeling RBBP5 with AP20943c at 1/25 dilution, followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/400 dilution (green). Confocal image showing nuclear staining on U-2 OS cell line. Cytoplasmic actin is detected with Alexa Fluor® 555 conjugated with Phalloidin (OB16636430) at 1/100 dilution (red).

Western blot analysis of lysates from MCF-7, K562 cell line and mouse spleen tissue(from left to right), using RBBP5 Antibody (C-term)(Cat. #AP20943c). AP20943c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.