

RNF40 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59168**Specification****RNF40 Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, E
Primary Accession	O75150
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	110 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human RNF40
Epitope Specificity	901-1001/1001
Isotype	IgG
Purity	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus.
SIMILARITY	Belongs to the BRE1 family. Contains 1 RING-type zinc finger.
SUBUNIT	Homodimer. Component of the RNF20/40 complex at least composed of 2 copies of RNF20/BRE1A, 2 copies of RNF40/BRE1B and UBE2E1/UBCH6. Interacts with RB1 and WAC.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

Ubiquitination is an important mechanism through which three classes of enzymes act in concert to target short-lived or abnormal proteins for destruction. The three classes of enzymes involved in ubiquitination are the ubiquitin-activating enzymes (E1s), the ubiquitin-conjugating enzymes (E2s) and the ubiquitin-protein ligases (E3s). RNF40 (RING finger protein 40), also known as BRE1B, Staring or RBP95, is a 1,001 amino acid nuclear protein that contains one RING-type zinc finger. Expressed ubiquitously with highest expression in heart, testis and pancreas, RNF40 functions as an E3 ubiquitin-protein ligase that regulates the monoubiquitination and subsequent degradation of select residues on target proteins, such as Histone H2B and Syntaxin 1. In addition, RNF40 forms a ubiquitin ligase complex with UBCH6 (an E2 enzyme) and together, these proteins play a crucial role in regulation of the histone code. Four isoforms of RNF40 exist due to alternative splicing events.

RNF40 Polyclonal Antibody - Additional Information**Gene ID 9810**

Other Names

E3 ubiquitin-protein ligase BRE1B, BRE1-B, 2.3.2.27, 95 kDa retinoblastoma-associated protein, RBP95, RING finger protein 40, RING-type E3 ubiquitin transferase BRE1B, RNF40, BRE1B, KIAA0661

Target/Specificity

Ubiquitously expressed. Expressed at higher level in testis, heart and pancreas, while it is only weakly expressed in lung, skeletal muscle and small intestine.

Dilution

IHC-P~~N/A
IHC-F~~N/A
IF~~1:50~200
E~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

RNF40 Polyclonal Antibody - Protein Information

Name RNF40

Synonyms BRE1B, KIAA0661

Function

Component of the RNF20/40 E3 ubiquitin-protein ligase complex that mediates monoubiquitination of 'Lys-120' of histone H2B (H2BK120ub1). H2BK120ub1 gives a specific tag for epigenetic transcriptional activation and is also prerequisite for histone H3 'Lys-4' and 'Lys-79' methylation (H3K4me and H3K79me, respectively). It thereby plays a central role in histone code and gene regulation. The RNF20/40 complex forms a H2B ubiquitin ligase complex in cooperation with the E2 enzyme UBE2A or UBE2B; reports about the cooperation with UBE2E1/UBCH are contradictory. Required for transcriptional activation of Hox genes.

Cellular Location

Nucleus.

Tissue Location

Ubiquitously expressed. Expressed at higher level in testis, heart and pancreas, while it is only weakly expressed in lung, skeletal muscle and small intestine

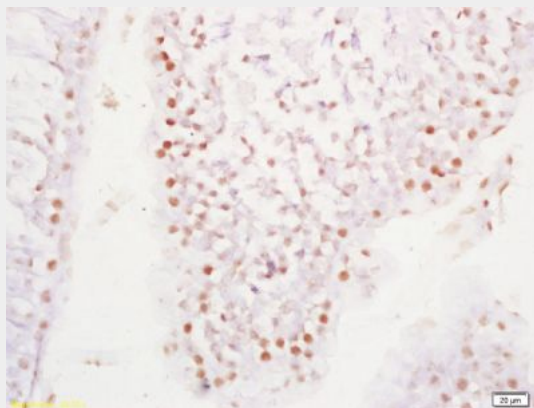
RNF40 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

RNF40 Polyclonal Antibody - Images



Tissue/cell: rat testis tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-RNF40 Polyclonal Antibody, Unconjugated(bs-9170R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining