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Anti-RbAp48 Picoband Antibody

Catalog # ABO12483

Specification

Anti-RbAp48 Picoband Antibody - Product Information

Application	**WB, IHC-P, IHC-F**
Primary Accession	Q09028
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Histone-binding protein RBBP4(RBBP4) detection. Tested with WB, IHC-P, IHC-F in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-RbAp48 Picoband Antibody - Additional Information

Gene ID 5928

Other Names
Histone-binding protein RBBP4, Chromatin assembly factor 1 subunit C, CAF-1 subunit C, Chromatin assembly factor I p48 subunit, CAF-I 48 kDa subunit, CAF-I p48, Nucleosome-remodeling factor subunit RBAP48, Retinoblastoma-binding protein 4, RBBP-4, Retinoblastoma-binding protein p48, RBBP4, RBAP48

Calculated MW
47656 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, By Heat
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml

Western blot, 0.1-0.5 µg/ml

Subcellular Localization
Nucleus.

Protein Name
Histone-binding protein RBBP4

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human RbAp48 (395-425aa EDNIMQVWQMAENIYNDEDPEGSVDPEGQGS), identical to the related mouse sequence.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-RbAp48 Picoband Antibody - Protein Information

Name RBBP4

Synonyms RBAP48

Function
Core histone-binding subunit that may target chromatin assembly factors, chromatin remodeling factors and histone deacetylases to their histone substrates in a manner that is regulated by nucleosomal DNA (PubMed:10866654). Component of the chromatin assembly factor 1 (CAF-1) complex, which is required for chromatin assembly following DNA replication and DNA repair (PubMed:8858152). Component of the core histone deacetylase (HDAC) complex, which promotes histone deacetylation and consequent transcriptional repression (PubMed:9150135). Component of the nucleosome remodeling and histone deacetylase complex (the NuRD complex), which promotes transcriptional repression by histone deacetylation and nucleosome remodeling (PubMed:16428440, PubMed:28977666, PubMed:39460621). Component of the PRC2 complex, which promotes repression of homeotic genes during development (PubMed:29499137, PubMed:31959557). Component of the NURF (nucleosome remodeling factor) complex (PubMed:14609955, PubMed:15310751).

Cellular Location
Nucleus. Chromosome, telomere. Note=Localizes to chromatin as part of the PRC2 complex.

Tissue Location
Expressed in neuroblastoma cells.

Anti-RbAp48 Picoband 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 Cytomety
- Cell Culture

Anti-RbAp48 Picoband Antibody - Images

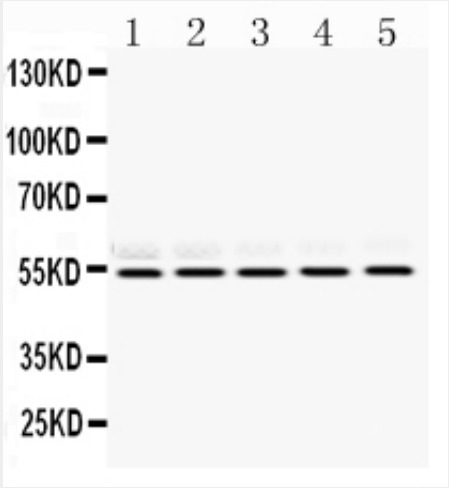

Figure 1. Western blot analysis of RbAp48 using anti-RbAp48 antibody (ABO12483). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: Rat Brain Tissue Lysate,Lane 2: Mouse Liver Tissue Lysate,Lane 3: Mouse Lung Tissue Lysate,Lane 4: HELA Whole Cell Lysate,Lane 5: JURKAT Whole Cell Lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-RbAp48 antigen affinity purified polyclonal antibody (Catalog # ABO12483) at 0.5 Î¼g/mL overnight at 4Â°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for RbAp48 at approximately 54KD. The expected band size for RbAp48 is at 54KD.

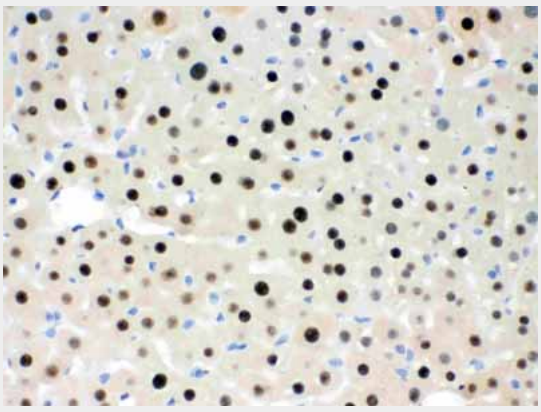

Figure 2. IHC analysis of RbAp48 using anti-RbAp48 antibody (ABO12483).RbAp48 was detected in paraffin-embedded section of Mouse Liver Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-RbAp48 Antibody (ABO12483) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used

as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

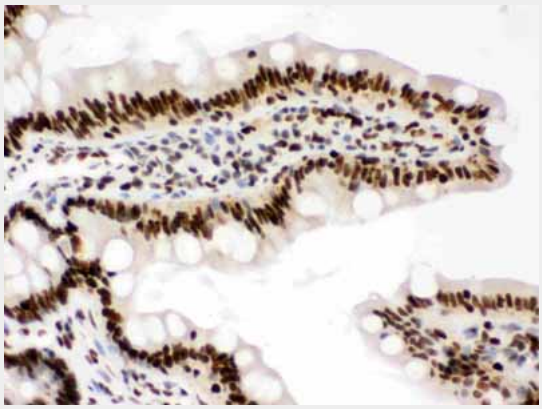

Figure 3. IHC analysis of RbAp48 using anti-RbAp48 antibody (ABO12483).RbAp48 was detected in paraffin-embedded section of Rat Intestine Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-RbAp48 Antibody (ABO12483) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

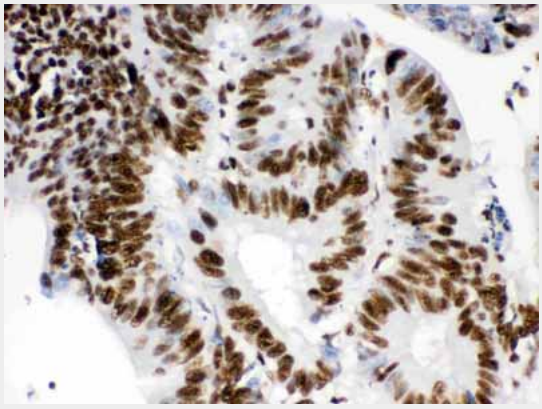

Figure 4. IHC analysis of RbAp48 using anti-RbAp48 antibody (ABO12483).RbAp48 was detected in paraffin-embedded section of Human Intestinal Cancer Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-RbAp48 Antibody (ABO12483) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

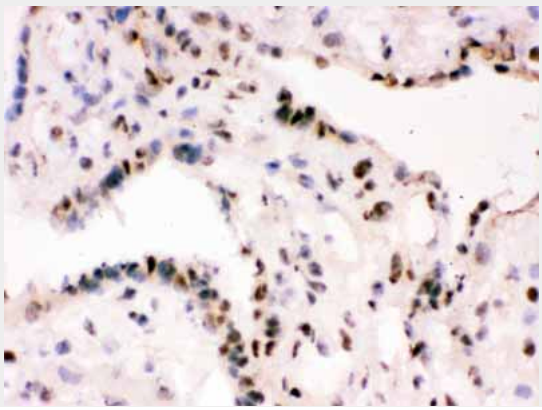

Figure 5. IHC analysis of RbAp48 using anti-RbAp48 antibody (ABO12483).RbAp48 was detected in frozen section of human placenta tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-RbAp48 Antibody (ABO12483) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

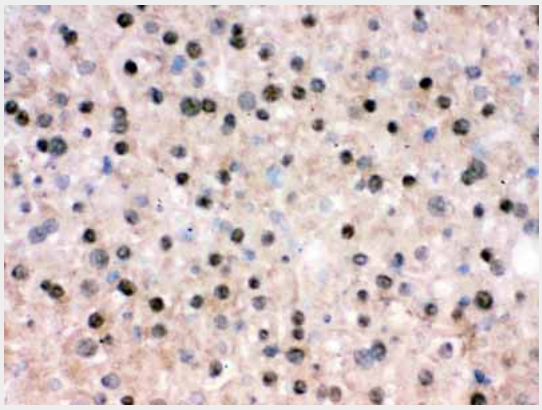

Figure 6. IHC analysis of RbAp48 using anti-RbAp48 antibody (ABO12483).RbAp48 was detected in frozen section of mouse liver tissue . Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-RbAp48 Antibody (ABO12483) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

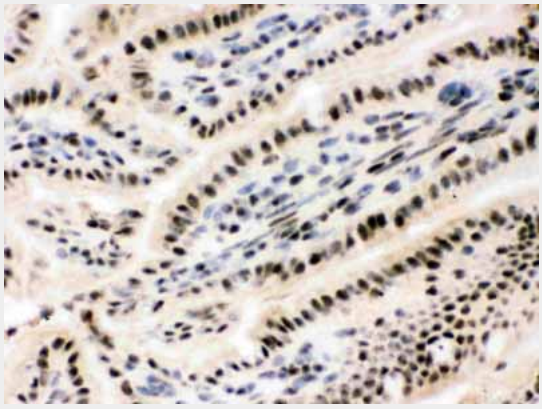

Figure 7. IHC analysis of RbAp48 using anti-RbAp48 antibody (ABO12483).RbAp48 was detected in frozen section of mouse small intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-RbAp48 Antibody (ABO12483) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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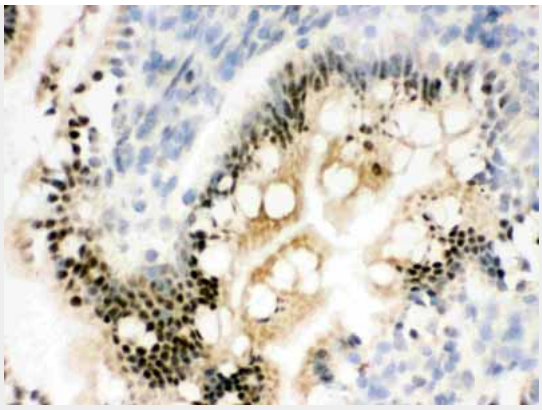

Figure 8. IHC analysis of RbAp48 using anti-RbAp48 antibody (ABO12483).RbAp48 was detected in frozen section of rat small intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-RbAp48 Antibody (ABO12483) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-RbAp48 Picoband Antibody - Background

Histone-binding protein RBBP4 (also known as RbAp48, or NURF55) is a protein that in humans is encoded by the RBBP4 gene. This gene encodes a ubiquitously expressed nuclear protein which belongs to a highly conserved subfamily of WD-repeat proteins. It is present in protein complexes involved in histone acetylation and chromatin assembly. And it is part of the Mi-2 complex which has been implicated in chromatin remodeling and transcriptional repression associated with histone deacetylation. This encoded protein is also part of co-repressor complexes, which is an integral component of transcriptional silencing. It is found among several cellular proteins that bind directly to retinoblastoma protein to regulate cell proliferation. This protein also seems to be involved in transcriptional repression of E2F-responsive genes. Three transcript variants encoding different isoforms have been found for this gene.