

Anti-BOB1 Monoclonal Antibody

Catalog # ABO14545

Specification

Anti-BOB1 Monoclonal Antibody - Product Information

Application	WB, IHC, IP
Primary Accession	<u>Q16633</u>
Host	Rabbit
lsotype	Rabbit IgG
Reactivity	Rat, Human
Clonality	Monoclonal
Format	Liquid
Description	
Anti-BOB1 Monoclonal Antibody . Tested in WB, IHC, IP applications. This antibody reacts with	
Human, Rat.	

Anti-BOB1 Monoclonal Antibody - Additional Information

Gene ID 5450

Other Names POU domain class 2-associating factor 1, B-cell-specific coactivator OBF-1, BOB-1, OCA-B, OCT-binding factor 1, POU2AF1 (HGNC:9211)

Calculated MW 37 kDa KDa

Application Details WB 1:500-1:2000
IHC 1:100-1:500
IP 1:30

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human BOB1 Transcriptional coactivator that specifically associates with either OCT1 or OCT2. It boosts the OCT1 mediated promoter activity and to a lesser extent, that of OCT2. It has no intrinsic DNA-binding activity. It recognizes the POU domains of OCT1 and OCT2. It is essential for the response of B-cells to antigens and required for the formation of germinal centers.

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated



freeze-thaw cycles.

Anti-BOB1 Monoclonal Antibody - Protein Information

Name POU2AF1 (HGNC:9211)

Function

Transcriptional coactivator that specifically associates with either POU2F1/OCT1 or POU2F2/OCT2 (PubMed:7859290). It boosts the POU2F1/OCT1 mediated promoter activity and to a lesser extent, that of POU2F2/OCT2 (PubMed:7779176). It recognizes the POU domains of POU2F1/OCT1 and POU2F2/OCT2 (PubMed:7779176). It recognizes the POU domains of POU2F1/OCT1 and POU2F2/OCT2 (PubMed:7779176). It is essential for the response of B-cells to antigens and required for the formation of germinal centers (PubMed:7623806, PubMed:7859290). Regulates IL6 expression in B cells as POU2F2/OCT2 coactivator (By similarity).

Cellular Location Nucleus.

Tissue Location

B-cell specific (PubMed:7779176, PubMed:7859290). Detected in mainly in spleen, but also in thymus, periphral blood leukocyte and small intestine (PubMed:7779176, PubMed:7859290)

Anti-BOB1 Monoclonal 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
- <u>Cell Culture</u>

Anti-BOB1 Monoclonal Antibody - Images





Figure 1. Western blot analysis of POU2AF1 using anti-POU2AF1 antibody (M04431).

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 30 ug of sample under reducing conditions.

Lane 1: human Raji whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-POU2AF1 antigen affinity purified monoclonal antibody (Catalog # M04431) at 1:500 overnight at 4°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 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for POU2AF1 at approximately 37 kDa. The expected band size for POU2AF1 is at 27 kDa.



Figure 2. IHC analysis of POU2AF1 using anti-POU2AF1 antibody (M04431).

POU2AF1 was detected in a paraffin-embedded section of human spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-POU2AF1 Antibody (M04431) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.





Figure 3. IHC analysis of POU2AF1 using anti-POU2AF1 antibody (M04431).

POU2AF1 was detected in a paraffin-embedded section of human spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-POU2AF1 Antibody (M04431) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



Figure 4. IHC analysis of POU2AF1 using anti-POU2AF1 antibody (M04431).

POU2AF1 was detected in a paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-POU2AF1 Antibody (M04431) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.





Figure 5. IHC analysis of POU2AF1 using anti-POU2AF1 antibody (M04431).

POU2AF1 was detected in a paraffin-embedded section of rat lymph tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-POU2AF1 Antibody (M04431) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.