



## Rabbit Anti-BOB1 antibody

SL12876R

<b>Product Name:</b>	BOB1
<b>Chinese Name:</b>	Blymphocyte特异性激活OCTBinding protein1 抗体
<b>Alias:</b>	B cell Oct binding protein 1; B cell specific coactivator OBF 1; B cell specific coactivator OBF1; B-cell-specific coactivator OBF-1; BOB 1; BOB-1; OBF 1; OBF1; OBF1_HUMAN; OCA B; OCA-B; OCAB; OCT binding factor 1; OCT-binding factor 1; POU domain class 2 associating factor 1; POU domain class 2-associating factor 1; POU2AF1; BOB.1.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	27kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human BOB1:1-100/256
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	POU domain proteins contain a bipartite DNA-binding domain divided by a flexible linker that enables them to adopt various monomer configurations on DNA. The versatility of POU protein operation is additionally conferred at the dimerization level.

The POU dimer from the OCT1 gene formed on the palindromic OCT factor recognition element, or PORE (ATTTGAAATGCAAAT), could recruit the transcriptional coactivator OBF1. Studies of tissue-specific expression of immunoglobulin promoters demonstrate the importance of an octamer, ATTTGCAT, and the proteins that bind to it. This is a regulatory element important for tissue- and cell-specific transcription as well as for transcription of a number of housekeeping genes. Oct-1 encodes one protein, NF-A1, which is found in nuclear extracts from all cell types and thus is not specific to lymphoid cells as is the protein NF-A2, which is encoded by Oct-2. A novel protein designated Bob 1 (B cell Oct binding protein 1), alternatively called OBF-1, specifically interacts with Oct-1 and Oct-2, enhancing their transcriptional efficacy. Bob 1 is expressed at highest levels in spleen and peripheral blood leukocytes and represents an Oct co-factor capable of conferring cell-specific activation of Oct-1 and Oct-2. Although having no intrinsic capacity for DNA binding, Bob 1 associates tightly with the octamer motif in the presence of Oct-1 and/or Oct-2. The gene which encodes Bob 1 maps to human chromosome 11q23.1.

**Function:**

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.

**Subcellular Location:**

Nucleus.

**Tissue Specificity:**

B-cell specific.

**Post-translational modifications:**

Ubiquitinated; mediated by SIAH1 or SIAH2 and leading to its subsequent proteasomal degradation.

**DISEASE:**

Note=A chromosomal aberration involving POU2AF1/OBF1 may be a cause of a form of B-cell leukemia. Translocation t(3;11)(q27;q23) with BCL6.

**Similarity:**

Belongs to the POU2AF1 family.

**SWISS:**

Q16633

**Gene ID:**

5450

**Database links:**

[Entrez Gene: 451537](#) Chimpanzee

[Entrez Gene: 528475](#) Cow

[Entrez Gene: 489413](#) Dog

[Entrez Gene: 101129955](#) Gorilla

[Entrez Gene: 100070302](#) Horse

[Entrez Gene: 5450](#) Human

[Entrez Gene: 100394635](#) Marmoset (common)

[Entrez Gene: 100437190](#) Orangutan

[Omim: 601206](#) Human

[SwissProt: Q2KJA4](#) Cow

[SwissProt: Q16633](#) Human

[Unigene: 654525](#) Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.