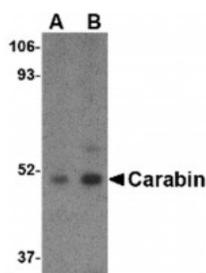


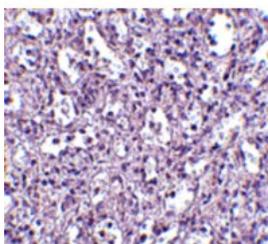


## Carabin Antibody

CATALOG NUMBER: 4267



Western blot analysis of Carabin in Daudi cell lysate with Carabin antibody at (A) 1 and (B) 2 ug/mL.



Immunohistochemistry of Carabin in human spleen tissue with Carabin antibody at 2.5 ug/mL.

### Specifications

<b>SPECIES REACTIVITY:</b>	Human, Mouse
<b>TESTED APPLICATIONS:</b>	ELISA, IHC-P, WB
<b>APPLICATIONS:</b>	Carabin antibody can be used for detection of Carabin by Western blot at 1 - 2 ug/mL. Antibody can also be used for immunohistochemistry starting at 2.5 ug/mL.
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>POSITIVE CONTROL:</b>	1) Cat. No. 1224 - Daudi Cell Lysate 2) Cat. No. 1306 - Human Spleen Tissue Lysate
<b>IMMUNOGEN:</b>	Carabin antibody was raised against a 16 amino acid synthetic peptide from near the carboxy terminus of human Carabin.  The immunogen is located within the last 50 amino acids of Carabin.
<b>HOST SPECIES:</b>	Rabbit

### Properties

<b>PURIFICATION:</b>	Carabin Antibody is affinity chromatography purified via peptide column.
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	Carabin Antibody is supplied in PBS containing 0.02% sodium azide.
<b>CONCENTRATION:</b>	1 mg/mL
<b>STORAGE CONDITIONS:</b>	Carabin antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
<b>CLONALITY:</b>	Polyclonal
<b>ISOTYPE:</b>	IgG
<b>CONJUGATE:</b>	Unconjugated

### Additional Info

<b>ALTERNATE NAMES:</b>	Carabin Antibody: EPI64C, CARABIN, Carabin, TBC1 domain family member 10C
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ACCESSION NO.:	NP_940919
PROTEIN GI NO.:	38348348
OFFICIAL SYMBOL:	TBC1D10C
GENE ID:	374403

### Background

**BACKGROUND:** Carabin Antibody: Antigen binding by the T-cell receptor (TCR) is one of the critical first steps in the immune response, triggering a cascade of signaling pathways that ultimately lead to T-cell activation. Screening a yeast two-hybrid screen of a human T-cell cDNA library with calcineurin, a protein phosphatase involved in multiple signaling pathways including T-cell activation, resulted in the identification of Carabin, a member of the TBC1 domain family of proteins, as a calcineurin-binding protein. Unlike other members of the TBC1 domain protein family which are thought to have a role in regulating cell growth and differentiation, further experiments demonstrated that Carabin is part of a negative regulatory loop for the intracellular TCR signaling pathway as well as an inhibitor of the Ras signaling pathway, suggesting that Carabin may also mediate crosstalk between calcineurin and Ras. Carabin antibody does not recognize TBC1D10A or TBC1D10B. Carabin is known to exist in multiple isoforms.

**REFERENCES:**

- 1) Weil R and Israel A. Deciphering the pathway from the TCR to NF-kappaB. *Cell Death Differ.*2006; 13:826-33.
- 2) Im SH and Rao A. Activation and deactivation of gene expression Ca<sup>2+</sup>/calcineurin-NFAT-mediated signaling. *Mol. Cells*2004; 18:1-9.
- 3) Pan F, Sun L, Kardian DB, et al. Feedback inhibition of calcineurin and ras by a dual inhibitory protein carabin. *Nature*2007; 445:433-6.
- 4) White RA, Pasztor LM, Richardson PM, et al. The gene encoding TBC1D1 with homology to the tre-2/USP6 oncogene, Bub2, and cdc16 maps to mouse chromosome 5 and human chromosome 4. *Cytogenet. Cell Genet.*2000; 89:272-5.

**FOR RESEARCH USE ONLY**

December 13, 2016