

# MOUSE Bcar3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20947c

### Specification

### MOUSE Bcar3 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	<u>090ZK2</u>
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG

### MOUSE Bcar3 Antibody (C-term) - Additional Information

#### Gene ID 29815

**Other Names** Breast cancer anti-estrogen resistance protein 3, p130Cas-binding protein AND-34, Bcar3, And34

#### Target/Specificity

This mouse Bcar3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 785-818 amino acids from the C-terminal region of mouse Bcar3.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** MOUSE Bcar3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **MOUSE Bcar3 Antibody (C-term) - Protein Information**

Name Bcar3

Synonyms And34

**Function** Acts as an adapter protein downstream of several growth factor receptors to promote cell proliferation, migration, and redistribution of actin fibers (PubMed:<u>12517963</u>). Specifically



involved in INS/insulin signaling pathway by mediating MAPK1/ERK2-MAPK3/ERK1 activation and DNA synthesis (By similarity). Promotes insulin-mediated membrane ruffling (By similarity). In response to vasoconstrictor peptide EDN1, involved in the activation of RAP1 downstream of PTK2B via interaction with phosphorylated BCAR1 (PubMed:<u>10896938</u>). Inhibits cell migration and invasion via regulation of TGFB-mediated matrix digestion, actin filament rearrangement, and inhibition of invadopodia activity (PubMed:<u>25499443</u>). May inhibit TGFB-SMAD signaling, via facilitating BCAR1 and SMAD2 and/or SMAD3 interaction (PubMed:<u>25499443</u>). Regulates EGF-induced DNA synthesis (By similarity). Required for the maintenance of ocular lens morphology and structural integrity, potentially via regulation of BCAR1 and PTPRA to focal adhesions, via regulation of SRC-mediated phosphorylation of PTPRA (PubMed:<u>22801373</u>). Positively regulates integrin-induced tyrosine phosphorylation of BCAR1 (PubMed:<u>22801373</u>). Acts as a guanine nucleotide exchange factor (GEF) for small GTPases RALA, RAP1A and RRAS (PubMed:<u>10896938</u>). However, in a contrasting study, lacks GEF activity towards RAP1 (By similarity).

### **Cellular Location**

Cytoplasm. Cell junction, focal adhesion Note=Localization to focal adhesions depends on interaction with PTPRA

#### **Tissue Location**

Abundantly expressed in the lung and brain, with lower expression in splenic lymphocytes and liver (at protein level) (PubMed:19365570). Expressed in splenic lymphocytes (at protein level) (PubMed:19365570). Expressed in the lymph node cortical region, periphery of the splenic white pulp and in alveolar lung fibroblasts (PubMed:19365570). Expressed in epithelial cells in the lens equatorial region and early stage nucleated cortical lens fiber cells (PubMed:19365570). Expressed in the thymus (PubMed:10438950). Expressed in B-cells (PubMed:12517963).

### MOUSE Bcar3 Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MOUSE Bcar3 Antibody (C-term) - Images





Western blot analysis of lysates from mouse spleen tissue lysate, using MOUSE Bcar3 Antibody (C-term)(Cat. #AP20947c). AP20947c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.

# MOUSE Bcar3 Antibody (C-term) - Background

May act as an adapter protein and couple activated growth factor receptors to signaling molecules that regulate src kinase activity and promote cell migration.

# MOUSE Bcar3 Antibody (C-term) - References

Cai D.,et al.J. Immunol. 163:2104-2112(1999). Carninci P.,et al.Science 309:1559-1563(2005). Gotoh T.,et al.J. Biol. Chem. 275:30118-30123(2000). Cai D.,et al.J. Immunol. 170:969-978(2003).