

# Rabbit Anti-phospho-BCAR1 (Tyr249) antibody

SL12574R

Product Name:	phospho-BCAR1 (Tyr249)
Chinese Name:	磷酸化乳腺癌抗雌激素耐药蛋白1抗体
Alias:	BCAR1 (phospho Y249); BCAR1(phospho Y249); p-BCAR1(p-Tyr249); Breast cancer anti estrogen resistance 1 protein; BCAR 1; Bcar1; BCAR1_HUMAN; Breast cancer
	scaffolding protein family member 1; Crk associated substrate; Crk associated substrate p130Cas; CRK-associated substrate; CRKAS; P130CAS.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	ELISA=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.
Molecular weight:	93kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human BCAR1 around the phosphorylation site of Tyr249:DI(p-Y)DV
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	PubMed
Product Detail:	p130 represents one of several known substrates for v-Crk encoded p47. p130 Cas (for

Crk-associated substrate) exhibits a high level of tyrosine phosphorylation and is tightly associated with v-Crk, suggesting a role in v-Crk-mediated cell signaling. The molecular cloning of p130 Cas has shown it to represent a novel SH3 containing signaling molecule with a cluster of multiple putative SH2-binding motifs for v-Crk. By immunoprecipitation analysis, p130 Cas has been shown to be highly phosphorylated at tyrosine residues subsequent to either v-Src p60 or v-Crk-mediated transformation and to form stable complexes with both of these transforming proteins. p130 Cas behaves as an extremely potent substrate for protein tyrosine kinases and has been reported to relocate from the cytoplasm to cell membrane upon tyrosine phosphorylation. One proposed model is that the SH2 domain of v-Crk functions to activate c-Src kinase, which in turn phosphorylates p130 Cas.

### Function:

Docking protein which plays a central coordinating role for tyrosine kinase-based signaling related to cell adhesion. Implicated in induction of cell migration. Overexpression confers antiestrogen resistance on breast cancer cells.

#### Subunit:

Forms complexes in vivo with PTK2/FAK1, adapter protein CRKL and LYN kinase. Can heterodimerize with NEDD9. Interacts with BCAR3, NPHP1 and SH2D3C (By similarity). Interacts with activated CSPG4. Interacts with BMX, INPPL1/SHIP2 and PEAK1. Part of a collagen-stimulated complex involved in cell migration made of CDC42, CRK, TNK2 and BCAR1/p130cas. Interacts with TNK2 via SH3 domains. Interacts with PTK2B/PYK2.

# Subcellular Location:

Cell junction, focal adhesion. Cytoplasm. Note=Unphosphorylated form localizes in the cytoplasm and can move to the membrane upon tyrosine phosphorylation

#### **Tissue Specificity:**

Widely expressed with an abundant expression in the testis. Low level of expression seen in the liver, thymus, and peripheral blood leukocytes. The protein has been detected in a B-cell line.

#### Post-translational modifications:

PTK2/FAK1 activation mediates phosphorylation at the YDYVHL motif; phosphorylation is most likely catalyzed by SRC family members. SRC-family kinases are recruited to the phosphorylated sites and can phosphorylate other tyrosine residues. Tyrosine phosphorylation is triggered by integrin-mediated adhesion of cells to the extracellular matrix.

# Similarity:

Belongs to the CAS family. Contains 1 SH3 domain.

SWISS:

# P56945 Gene ID: 9564 Database links: Entrez Gene: 527550Cow Entrez Gene: 9564Human Entrez Gene: 12927Mouse dbiotech.com Entrez Gene: 25414Rat Omim: 602941Human SwissProt: P56945Human SwissProt: Q61140Mouse SwissProt: Q63767Rat Unigene: 479747Human Unigene: 3758Mouse Unigene: 40101Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.