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MOUSE Bcar3 Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP20947c

Specification

MOUSE Bcar3 Blocking Peptide (C-term) - Product Information

Primary Accession Q9QZK2

MOUSE Bcar3 Blocking Peptide (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
The synthetic peptide sequence is selected from aa 785-798 of HUMAN Bcar3

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MOUSE Bcar3 Blocking Peptide (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:12517963). 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:10896938). Inhibits cell migration and invasion via regulation of TGFB-mediated matrix digestion, actin filament rearrangement, and inhibition of invadopodia activity (PubMed:25499443). May inhibit TGFB-SMAD signaling, via facilitating BCAR1 and SMAD2 and/or SMAD3 interaction (PubMed:25499443). Regulates

EGF-induced DNA synthesis (By similarity). Required for the maintenance of ocular lens morphology and structural integrity, potentially via regulation of focal adhesion complex signaling (PubMed:19365570). Acts upstream of PTPRA to regulate the localization of BCAR1 and PTPRA to focal adhesions, via regulation of SRC-mediated phosphorylation of PTPRA (PubMed:22801373). Positively regulates integrin-induced tyrosine phosphorylation of BCAR1 (PubMed:22801373). Acts as a guanine nucleotide exchange factor (GEF) for small GTPases RALA, RAP1A and RRAS (PubMed:10896938). 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 Blocking Peptide (C-term) - Protocols

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

- Blocking Peptides

MOUSE Bcar3 Blocking Peptide (C-term) - Images

MOUSE Bcar3 Blocking Peptide (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 Blocking Peptide (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).