

## RB1CC1 Antibody (Center) Blocking peptide

Synthetic peptide Catalog # BP11791c

## **Specification**

## **RB1CC1** Antibody (Center) Blocking peptide - Product Information

Primary Accession <u>Q8TDY2</u>

Other Accession <u>NP\_055596.3</u>, <u>NP\_001077086.1</u>

## RB1CC1 Antibody (Center) Blocking peptide - Additional Information

**Gene ID** 9821

### **Other Names**

RB1-inducible coiled-coil protein 1, FAK family kinase-interacting protein of 200 kDa, FIP200, RB1CC1, KIAA0203, RBICC

#### **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.

# RB1CC1 Antibody (Center) Blocking peptide - Protein Information

Name RB1CC1 (HGNC:15574)

Synonyms KIAA0203, RBICC

# **Function**

Involved in autophagy (PubMed: <a href="http://www.uniprot.org/citations/21775823"

target="\_blank">21775823</a>). Regulates early events but also late events of autophagosome formation through direct interaction with Atg16L1 (PubMed:<a

href="http://www.uniprot.org/citations/23392225" target="\_blank">23392225</a>). Required for the formation of the autophagosome-like double-membrane structure that surrounds the Salmonella-containing vacuole (SCV) during S.typhimurium infection and subsequent xenophagy (By similarity). Involved in repair of DNA damage caused by ionizing radiation, which subsequently improves cell survival by decreasing apoptosis (By similarity). Inhibits PTK2/FAK1 and PTK2B/PYK2 kinase activity, affecting their downstream signaling pathways (PubMed:<a

href="http://www.uniprot.org/citations/10769033" target="\_blank">10769033</a>, PubMed:<a href="http://www.uniprot.org/citations/12221124" target="\_blank">12221124</a>). Plays a role as a modulator of TGF-beta-signaling by restricting substrate specificity of RNF111 (By similarity). Functions as a DNA-binding transcription factor (PubMed:<a

href="http://www.uniprot.org/citations/12095676" target=" blank">12095676</a>). Is a potent



regulator of the RB1 pathway through induction of RB1 expression (PubMed:<a href="http://www.uniprot.org/citations/14533007" target=" blank">14533007</a>). Plays a crucial role in muscular differentiation (PubMed:<a

href="http://www.uniprot.org/citations/12163359" target=" blank">12163359</a>). Plays an indispensable role in fetal hematopoiesis and in the regulation of neuronal homeostasis (By similarity).

#### **Cellular Location**

Nucleus. Cytoplasm. Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q9ESK9}. Preautophagosomal structure. Lysosome Note=Under starvation conditions, is localized to puncate structures primarily representing the isolation membrane that sequesters a portion of the cytoplasm resulting in the formation of an autophagosome

#### **Tissue Location**

Expression levels correlated closely with those of RB1 in cancer cell lines as well as in various normal human tissues Abundantly expressed in human musculoskeletal and cultured osteosarcoma cells.

# **RB1CC1** Antibody (Center) Blocking peptide - Protocols

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

### • Blocking Peptides

## RB1CC1 Antibody (Center) Blocking peptide - Images

# RB1CC1 Antibody (Center) Blocking peptide - Background

The protein encoded by this gene interacts with signaling pathways to coordinately regulate cell growth, cell proliferation, apoptosis, autophagy, and cell migration. This tumor suppressoralso enhances retinoblastoma 1 gene expression in cancer cells. Alternative splicing results in multiple transcript variantsencoding distinct isoforms.

### RB1CC1 Antibody (Center) Blocking peptide - References

Bailey, S.D., et al. Diabetes Care (2010) In press: Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Fellay, J., et al. PLoS Genet. 5 (12), E1000791 (2009) :Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)