

RIOK2 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP7009c**Specification**

RIOK2 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q9BVS4](#)**RIOK2 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 55781**Other Names**

Serine/threonine-protein kinase RIO2, RIO kinase 2, RIOK2

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7009c](/product/products/AP7009c) was selected from the Center region of human RIOK2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

RIOK2 Antibody (Center) Blocking Peptide - Protein Information**Name** RIOK2 ([HGNC:18999](#))**Function**

Serine/threonine-protein kinase involved in the final steps of cytoplasmic maturation of the 40S ribosomal subunit. Involved in export of the 40S pre-ribosome particles (pre-40S) from the nucleus to the cytoplasm. Its kinase activity is required for the release of NOB1, PNO1 and LTV1 from the late pre-40S and the processing of 18S-E pre- rRNA to the mature 18S rRNA (PubMed:[19564402](http://www.uniprot.org/citations/19564402)). Regulates the timing of the metaphase-anaphase transition during mitotic progression, and its phosphorylation, most likely by PLK1, regulates this function (PubMed:[21880710](http://www.uniprot.org/citations/21880710)).

Cellular Location

Cytoplasm. Note=Exported out of the nucleus via its NES in a XPO1-dependent manner.

RIOK2 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

RIOK2 Antibody (Center) Blocking Peptide - Images

RIOK2 Antibody (Center) Blocking Peptide - Background

RIOK2 belongs to the protein kinase superfamily; RIO-type Ser/Thr kinase family. Serine/threonine protein kinases, such as RIOK2, phosphorylate the OH group of serine or threonine (which have similar sidechains). Activity of these protein kinases can be regulated by specific events (e.g. DNA damage), as well as numerous chemical signals, including cAMP/cGMP, Diacylglycerol, and Ca²⁺/calmodulin.

RIOK2 Antibody (Center) Blocking Peptide - References

Ota, T., et al., Nat. Genet. 36(1):40-45 (2004).