

CERK Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP7088a**Specification**

CERK Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession
Other Accession[Q8TCT0](#)
[NP_073603](#)**CERK Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 64781**Other Names**

Ceramide kinase, hCERK, Acylsphingosine kinase, Lipid kinase 4, LK4, CERK, KIAA1646

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7088a](/product/products/AP7088a) was selected from the N-term region of human CERK. 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.

CERK Antibody (N-term) Blocking Peptide - Protein Information**Name** CERK**Synonyms** KIAA1646**Function**

Catalyzes specifically the phosphorylation of ceramide to form ceramide 1-phosphate (PubMed: [11956206](http://www.uniprot.org/citations/11956206), PubMed: [16269826](http://www.uniprot.org/citations/16269826), PubMed: [19168031](http://www.uniprot.org/citations/19168031)). Acts efficiently on natural and analog ceramides (C6, C8, C16 ceramides, and C8-dihydroceramide), to a lesser extent on C2- ceramide and C6-dihydroceramide, but not on other lipids, such as various sphingosines (PubMed: [11956206](http://www.uniprot.org/citations/11956206), PubMed: [16269826](http://www.uniprot.org/citations/16269826), PubMed: [19168031](http://www.uniprot.org/citations/19168031)).

target="_blank">19168031). Shows a greater preference for D-erythro isomer of ceramides (PubMed:16269826). Binds phosphoinositides (PubMed:19168031).

Cellular Location

Cytoplasm. Cell membrane; Peripheral membrane protein

Tissue Location

High level expression in heart, brain, skeletal muscle, kidney and liver; moderate in peripheral blood leukocytes and thymus; very low in spleen, small intestine, placenta and lung

CERK Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CERK Antibody (N-term) Blocking Peptide - Images**CERK Antibody (N-term) Blocking Peptide - Background**

Ceramide kinases convert the sphingolipid metabolite ceramide into ceramide-1-phosphate, both key mediators of cellular apoptosis and survival. Ceramide metabolism plays an essential role in the viability of neuronal cells, the membranes of which are particularly rich in sphingolipids. CERK catalyzes specifically the phosphorylation of ceramide to form ceramide 1-phosphate. This enzyme acts efficiently on natural and analog ceramides (C6, C8, C16 ceramides, and C8 dihydroceramide), and to a lesser extent on C2-ceramide and C6-dihydroceramide, but not on other lipids, such as various sphingosines. High level expression is noted in heart, brain, skeletal muscle, kidney and liver; moderate expression in peripheral blood leukocytes and thymus; and low expression in spleen, small intestine, placenta and lung.

CERK Antibody (N-term) Blocking Peptide - References

J. Biol. Chem. 279 (17), 17570-17577 (2004)J. Biol. Chem. 278 (40), 38206-38213 (2003)J. Biol. Chem. 277 (26), 23294-23300 (2002)