

**CERK Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP7088b**

**Specification**

---

**CERK Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">Q8TCT0</a>
Other Accession	<a href="#">NP_073603</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	487-516

**CERK Antibody (C-term) - Additional Information**

**Gene ID** 64781

**Other Names**

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

**Target/Specificity**

This CERK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 487-516 amino acids from the C-terminal region of human CERK.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CERK Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**CERK Antibody (C-term) - Protein Information**

**Name** CERK

**Synonyms** KIAA1646

**Function** Catalyzes specifically the phosphorylation of ceramide to form ceramide 1-phosphate

(PubMed:[11956206](#), PubMed:[16269826](#), PubMed:[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](#), PubMed:[16269826](#), PubMed:[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

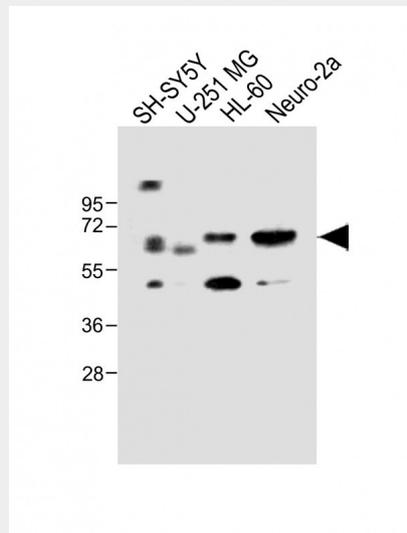
High level expression in heart, brain, skeletal muscle, kidney and liver; moderate in peripheral blood leukocytes and thymus; very low in spleen, small intestine, placenta and lung

### CERK Antibody (C-term) - Protocols

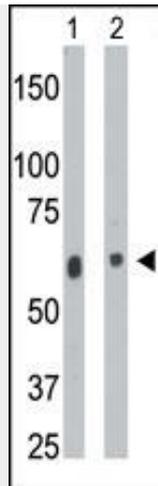
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### CERK Antibody (C-term) - Images



All lanes : Anti-CERK Antibody (C-term) at 1:1000 dilution Lane 1: SH-SY5Y whole cell lysate Lane 2: U-251 MG whole cell lysate Lane 3: HL-60 whole cell lysate Lane 4: Neuro-2a whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 60 kDa Blocking/Dilution buffer: 5% NFD/MBST.



The anti-CERK Pab (Cat. #AP7088b) is used in Western blot to detect CERK in mouse heart tissue lysate (Lane 1) and A2058 cell lysate (Lane 2).

### **CERK Antibody (C-term) - 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 (C-term) - 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)

### **CERK Antibody (C-term) - Citations**

- [Regulation of adipogenesis by ceramide 1-phosphate.](#)
- [Implication of Ceramide Kinase in Adipogenesis.](#)
- [ATRA inhibits ceramide kinase transcription in a human neuroblastoma cell line, SH-SY5Y cells: the role of COUP-TFI.](#)
- [Cardiovascular inflammation and lesion cell apoptosis: a novel connection via the interferon-inducible immunoproteasome.](#)
- [Ceramide kinase promotes Ca<sup>2+</sup> signaling near IgG-opsonized targets and enhances phagolysosomal fusion in COS-1 cells.](#)