

## Active Recombinant Human CERK, Flag-tagged

**Cat. No.** CERK-510H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Human CERK, fused with C-terminal Flag tag, was expressed in Sf9 cells.                                                                                                                                                                                                                                                                                             |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Source</b>           | Sf9 Cells                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Description</b>      | CERK converts ceramide to ceramide 1-phosphate (C1P), a sphingolipid metabolite. Both CERK and C1P have been implicated in various cellular processes, including proliferation, apoptosis, phagocytosis, and inflammation.                                                                                                                                                      |
| <b>Form</b>             | Provided in 40 mM Tris-HCl pH 8.0, 110 mM NaCl, 2.2 mM KCl, 40 g/ml Flag peptide, 3 mM DTT and 20% glycerol                                                                                                                                                                                                                                                                     |
| <b>Bio-activity</b>     | 142 pmole/min/μg. Assay conditions: CERK activity was measured at 37 oC for 25 min in a buffer (20 mM HEPES pH7.2, 80 mM KCl, 3 mM CaCl <sub>2</sub> , 10 mM MgCl <sub>2</sub> , 2 mM DTT, 5 μM ATP) using a μ-Octylglucoside mixed micellar assay with 100 μM Ceramide. ATP reduction was detected using Kinase-Glo® Luminescent Kinase Assay Platform (Promega, Madison, WI). |
| <b>Molecular Mass</b>   | 87 kDa                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Purity</b>           | 0.8                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Applications</b>     | Useful for the study of enzyme kinetics, screening inhibitors, and selectivity profiling                                                                                                                                                                                                                                                                                        |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

**Storage** Product should be stored at -70°C. Aliquot to avoid freeze/thaw cycles.

## GENE INFORMATION

**Gene Name** CERK ceramide kinase [ Homo sapiens ]

**Official Symbol** CERK

**Synonyms** CERK; LK4; hCERK; dA59H18.2; dA59H18.3; ceramide kinase; lipid kinase 4; lipid kinase LK4; acylsphingosine kinase; NP\_073603.2; EC 2.7.1.138

**Gene ID** 64781

**mRNA Refseq** NM\_022766

**Protein Refseq** NP\_073603

**MIM** 610307

**UniProt ID** Q8TCT0

**Chromosome Location** 22q13.31

**Pathway** Glycosphingolipid metabolism; Integrated Breast Cancer Pathway; Sphingolipid Metabolism

**Function** ATP binding; NAD<sup>+</sup> kinase activity; ceramide kinase activity

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA