

**AP05210PU-N****Polyclonal Antibody to Ceremide Kinase - Purified**

<b>Alternate names:</b>	Acylsphingosine kinase, LK4, Lipid kinase 4, hCERK
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	Lot specific
<b>Background:</b>	Sphingolipids and their metabolic products, including ceramide, sphingosine, and sphingosine-1-phosphate (S1P), are important signaling molecules in many biological processes. Ceramide has been is one of the key elements regulating apoptotic responses. Ceramide has been reported as a regulator of several protein kinases and phosphatases, including ceramide-activated protein kinase, protein phosphatase, and protein kinase C. Sphingosine, a metabolite of ceramide, might also play a role in mitochondriamediated apoptosis. Sphingosine inhibits several protein kinases, including protein kinase C and Ca <sup>2+</sup> -calmodulin-dependent kinase II. S1P regulates many biological processes, including mitogenesis, differentiation, migration, and suppression of apoptosis.
<b>Host:</b>	Rabbit
<b>Immunogen:</b>	Recombinant full-length human ceramide kinase protein
<b>Format:</b>	<b>State:</b> Liquid purified Ig <b>Buffer System:</b> Phosphate buffered saline with 0.08% sodium azide
<b>Applications:</b>	ELISA. Western Blot: 1 - 10 µg/ml. Positive Control: High level expression in heart, brain, skeletal muscle, kidney and liver. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody reacts to Ceremide Kinase. <b>Species:</b> Human. Other species not tested.
<b>Storage:</b>	The antibody can be shipped at ambient temperature. Store (in aliquots) at -20°C only. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
<b>General Readings:</b>	1. Lamour NF, Chalfant CE. Ceramide-1-phosphate: the "missing" link in eicosanoid biosynthesis and inflammation. <i>Mol Interv.</i> 2005 Dec;5(6):358-67. PubMed PMID: 16394251. 2. Kim JW, Inagaki Y, Mitsutake S, Maezawa N, Katsumura S, Ryu YW, et al. Suppression of mast cell degranulation by a novel ceramide kinase inhibitor, the F-12509A olefin isomer K1. <i>Biochim Biophys Acta.</i> 2005 Dec 30;1738(1-3):82-90. Epub 2005 Nov 14. PubMed PMID: 16352467. 3. Van Overloop H, Gijsbers S, Van Veldhoven PP. Further characterization of mammalian ceramide kinase: substrate delivery and (stereo)specificity, tissue distribution, and subcellular localization studies. <i>J Lipid Res.</i> 2006 Feb;47(2):268-83.

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5. Mitsutake S, Igarashi Y. Calmodulin is involved in the Ca<sup>2+</sup>-dependent activation of ceramide kinase as a calcium sensor. *J Biol Chem.* 2005 Dec 9;280(49):40436-41.

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