

Ceramide Kinase (rProtein-Full Length). Rabbit Polyclonal Antibody , Human

Acylsphingosine kinase, hCERK, Lipid kinase 4, LK4

BACKGROUND

Sphingolipids and their metabolic products, including ceramide, sphingosine, and sphingosine-1-phosphate (S1P),¹ 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 mitochondria-mediated apoptosis. Sphingosine inhibits several protein kinases, including protein kinase C and Ca²⁺-calmodulin-dependent kinase II. S1P regulates many biological processes, including mitogenesis, differentiation, migration, and suppression of apoptosis.

ORDERING INFORMATION

CATALOG NUMBER
X1705P

SIZE
100 µg

FORM
Unconjugated

HOST/CLONE
Rabbit

FORMULATION
Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
1 mg/ml

ISOTYPE
N/A

APPLICATIONS
ELISA, Western Blot

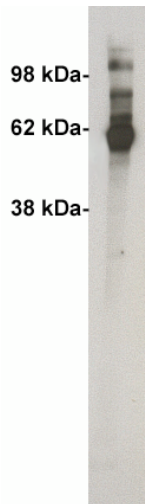
IMMUNOGEN

Recombinant full-length human ceramide kinase protein

SPECIES REACTIVITY

Human

Legend: Western blot analysis using Ceramide Kinase antibody (X1705P) on 30 ng of recombinant ceramide kinase. Antibody used at 2 µg/ml. Visualized using Pierce West Femto substrate system. Secondary used at 1:75k dilution. Exposure for 60 seconds.



For research use only. Not for use in human diagnostics or therapeutics.

POSITIVE CONTROL/TISSUE EXPRESSION

High level expression in heart, brain, skeletal muscle, kidney and liver

COMMENTS

Antibody can be used for Western blotting (1-10µg/ml). Can also be used for ELISA. Optimal concentration should be evaluated by serial dilutions.

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

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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.' *J Lipid Res.* 2006 Feb;47(2):268-83. Epub 2005 Nov 3.
4. Chalfant CE, Spiegel S. 'Sphingosine 1-phosphate and ceramide 1-phosphate: expanding roles in cell signaling.' *J Cell Sci.* 2005 Oct 15;118(Pt 20):4605-12. Review.
5. Mitsutake S, Igarashi Y. 'Calmodulin is involved in the Ca²⁺-dependent activation of ceramide kinase as a calcium sensor.' *J Biol Chem.* 2005 Dec 9;280(49):40436-41. Epub 2005 Oct 3.
6. Wijesinghe DS, Massiello A, Subramanian P, Szulc Z, Bielawska A, Chalfant CE. 'Substrate specificity of human ceramide kinase.' *J Lipid Res.* 2005 Dec;46(12):2706-16. Epub 2005 Sep 18.
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