Datasheet for ABIN7601530

anti-PI4KB antibody (AA 375-671)

Go to Product page

Overview

Quantity:	100 µg
Target:	PI4KB
Binding Specificity:	AA 375-671
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PI4KB antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Flow Cytometry (FACS)

Product Details

Purpose:	Anti-PI4KB Antibody Picoband®
Immunogen:	E.coli-derived human PI4KB recombinant protein (Position: D375-D671). Human PI4KB shares 100% and 99.7% amino acid (aa) sequence identity with mouse and rat PI4KB, respectively
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Anti-PI4KB Antibody Picoband® (ABIN7601530). Tested in ELISA, IHC, WB, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	PI4KB
Alternative Name:	PI4KB (PI4KB Products)
Background:	Synonyms: 70 kDa ribosomal protein S6 kinase 1 antibody, KS6B1_HUMAN antibody, p70 alpha antibody, P70 beta 1 antibody, p70 ribosomal S6 kinase alpha antibody, p70 ribosomal S6 kinase beta 1 antibody, p70 S6 kinase alpha antibody, P70 S6 Kinase antibody, p70 S6 kinase alpha 1 antibody, p70 S6 kinase alpha 2 antibody, p70 S6K antibody, p70 S6K-alpha antibody, p70 S6KA antibody, p70(S6K) alpha antibody, p70(S6K)-alpha antibody, p70-alpha antibody, p70-S6K 1 antibody, p70-S6K antibody, P70S6K antibody, P70S6K1 antibody, p70S6Kb antibody, PS6K antibody, Ribosomal protein S6 kinase 70 kDa polypeptide 1 antibody, Ribosomal protein S6 kinase beta 1 antibody, Ribosomal protein S6 kinase beta-1 antibody, Ribosomal protein S6 kinase I antibody, RPS6KB1 antibody, S6K antibody, S6K-beta-1 antibody, S6K1 antibody, Serine/threonine kinase 14 alpha antibody, Serine/threonine-protein kinase 14A antibody, STK14A antibody Tissue Specificity: Expressed in all tissues. Background: Phosphatidylinositol 4-kinase beta is an enzyme that in humans is encoded by the PI4KB gene. Inositol phospholipids have an important role in intracellular signaling in response to hormones, growth factors and neurotransmitters. Phosphatidylinositol 4-kinase phosphorylates phosphatidylinositol (PI) to phosphatidylinositol-4-phosphate (PIP). In a second step, PIP is further phosphorylated to phosphatidylinositol-4,5-bisphosphate (PIP2), and PIP2 is subsequently hydrolyzed by phospholipase C, producing the two intracellular second messengers, inositol 1,4,5-triphosphate (IP3) and diacylglycerol (DAG). PI4K230, PI4K92 and PI4K55 are three PI4 kinase isoforms that have been characterized and classified according to their molecular weights of 230, 92 and 55 kD. Previously, PI4 kinases were classified into type II and III enzymes. All isoforms are located on distinct membranes and cellular compartments suggesting various tasks. PI4K230 is located at the endoplasmatic reticulum and outer membranes of mitochondria, PI4K92 at the Golgi apparatus and endoplasmatic reticulum, and PI4K55 at the plasma membrane and endosomes. PI4K230 is predominantly expressed in brain and moderately sensitive to wortmannin as well as specifically and irreversibly inhibited by cyclitol derivatives.
Molecular Weight:	95 kDa
Gene ID:	5298
Pathways:	Inositol Metabolic Process

Application Details

Application Notes:	Western blot, 0.25-0.5 µg/mL, Human, Mouse, Rat Immunohistochemistry, 2-5 µg/mL, Human Flow Cytometry (Fixed), 1-3 µg/1x10^6 cells, Human ELISA, 0.1-0.5 µg/mL, - 1. Burke, J. E., Inglis, A. J., Perisic, O., Masson, G. R., McLaughlin, S. H., Rutaganira, F., Shokat, K. M., Williams, R. L. Structures of PI4KIII-beta complexes show simultaneous recruitment of Rab11 and its effectors. Science 344: 1035-1038, 2014. 2. Gromada, J., Bark, C., Smidt, K., Efanov, A. M., Janson, J., Mandic, S. A., Webb, D.-L., Zhang, W., Meister, B., Jeromin, A., Berggren, P.-O. Neuronal calcium sensor-1 potentiates glucose-dependent exocytosis in pancreatic beta cells through activation of phosphatidylinositol 4-kinase beta. Proc. Nat. Acad. Sci. 102: 10303-10308, 2005. 3. Jovic, M., Kean, M. J., Szentpetery, Z., Polevoy, G., Gingras, A.-C., Brill, J. A., Balla, T. Two phosphatidylinositol 4-kinases control lysosomal delivery of the Gaucher disease enzyme, beta-glucocerebrosidase. Molec. Biol. Cell 23: 1533-1545, 2012.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.