Datasheet for ABIN5518862

anti-PIK3CB antibody (Middle Region)

3 Images | 2 Publications

Go to Product page

Overview

Quantity:	100 µg
Target:	PIK3CB
Binding Specificity:	AA 556-598, Middle Region
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit beta isoform(PIK3CB) detection. Tested with WB, IHC-P in Human,Mouse,Rat.
Immunogen:	A synthetic peptide corresponding to a sequence in the middle region of human PIK3CB (556-598aa DLIWTLRQDCREIFPQSLPKLLLSIKWNKLEDVAQLQALLQIW), different from the related mouse and rat sequences by one amino acid.
Sequence:	DLIWTLRQDC REIFPQSLPK LLLSIKWNKL EDVAQLQALL QIW
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit beta isoform(PIK3CB) detection. Tested with WB, IHC-P in Human,Mouse,Rat. Gene Name: phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta Protein Name: Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit beta isoform

Product Details

Purification:	Immunogen affinity purified.

Target Details

Target:	PIK3CB
Alternative Name:	PIK3CB (PIK3CB Products)
Background:	Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta isoform is an enzyme that in humans is encoded by the PIK3CB gene. This gene encodes an isoform of the catalytic subunit of phosphoinositide 3-kinase (PI3K). These kinases are important in signaling pathways involving receptors on the outer membrane of eukaryotic cells and are named for their catalytic subunit. The encoded protein is the catalytic subunit for PI3Kbeta (PI3KB). PI3KB has been shown to be part of the activation pathway in neutrophils which have bound immune complexes at sites of injury or infection. Alternative splicing results in multiple transcript variants. Synonyms: p110 BETA | p110Beta | PI3K | PI3K beta | PI3K-beta | PI3Kbeta | PI3KCB | PIK3C1 | Pik3cb | P42338
Gene ID:	5291
UniProt:	P42338

Application Details

Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Mouse, Rat IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections. Notes: Tested Species: Species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).
Restrictions:	For Research Use only

Handling

Format:	Lyophilized

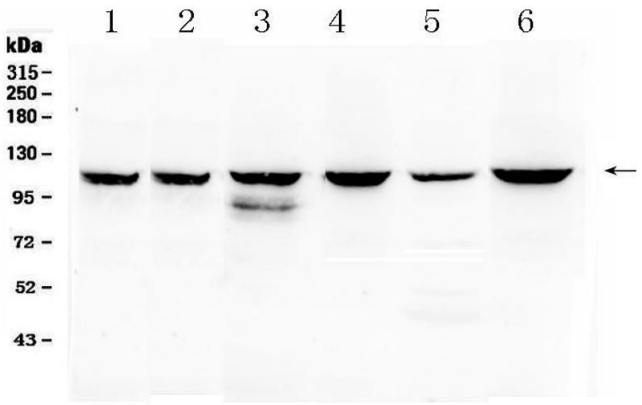
Handling

Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

Publications

Product cited in:	Zhou, Xiong, Huang, Tang, Yu, Lan: "Identification of Genes Associated with Smad3-dependent Renal Injury by RNA-seq-based Transcriptome Analysis." in: **Scientific reports**, Vol. 5, pp. 17901, (2016) (PubMed).

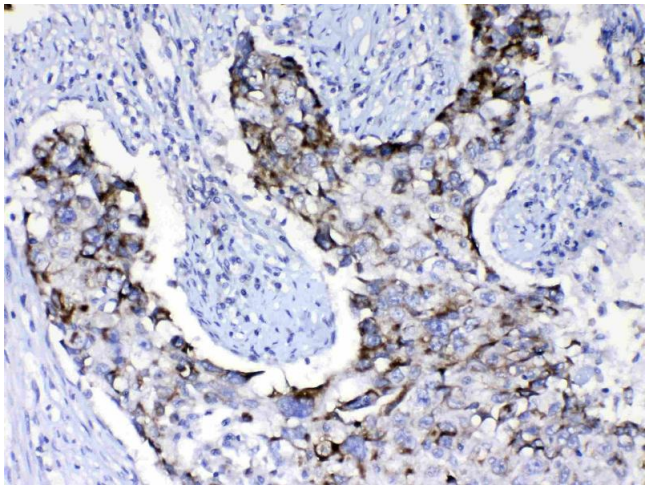
Images



Western Blotting

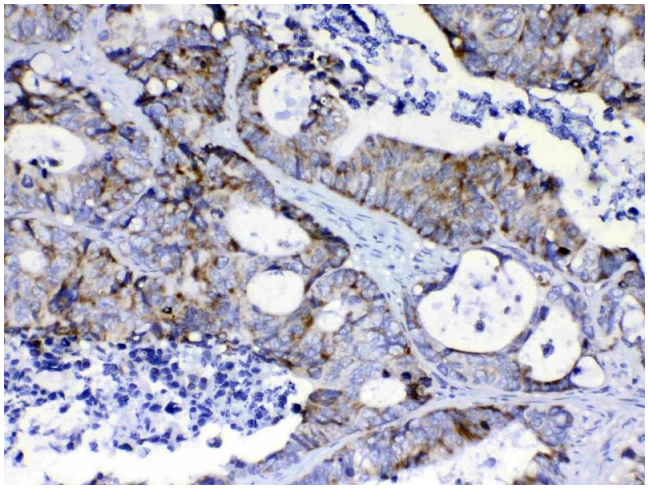
Image 1. Western blot analysis of PIK3CB using anti-PIK3CB antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat liver tissue lysates, Lane 2: rat kidney tissue lysates, Lane 3: mouse spleen tissue lysates, Lane 4: mouse thymus tissue lysates, Lane 5: MCF-7 whole Cell lysates, Lane 6: K562 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- PIK3CB antigen affinity purified polyclonal

antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for PIK3CB at approximately 110KD. The expected band size for PIK3CB is at 123KD.



Immunohistochemistry

Image 2. IHC analysis of PIK3CB using anti- PIK3CB antibody . PIK3CB was detected in paraffin-embedded section of human intestinal cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti- PIK3CB Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



Immunohistochemistry

Image 3. IHC analysis of PIK3CB using anti- PIK3CB antibody . PIK3CB was detected in paraffin-embedded section of human lung cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti- PIK3CB Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the

chromogen.

