

## Rabbit PI3K-gamma/PIK3CG Polyclonal Antibody | anti-PIK3CG antibody

Anti-PI3K-gamma/PIK3CG Antibody

| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                                                                |
|-----------|--------|-------------------|-----------------------------------------------------------------------------|
| AAA125609 | Rabbit | Human, Mouse, Rat | ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot |

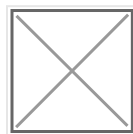
### PRODUCT SYNONYMS

PI3K-gamma/PIK3CG; Polyclonal Antibody; Anti-PI3K-gamma/PIK3CG Antibody; PIK3CG; Phosphatidylinositol 4; 5-bisphosphate 3-kinase catalytic subunit gamma isoform; PI3-kinase subunit gamma; PI3K-gamma; PI3Kgamma; PtdIns-3-kinase subunit gamma; EC 2. 7. 1. 153; 5-bisphosphate 3-kinase 110 kDa catalytic subunit gamma; PtdIns-3-kinase subunit p110-gamma; p110gamma; Phosphoinositide-3-kinase catalytic gamma polypeptide; Serine/threonine protein kinase PIK3CG; EC 2. 7. 11. 1; p120-PI3K; PIK3CG phosphatidylinositol-4; 5-bisphosphate 3-kinase catalytic subunit gamma; anti-PIK3CG antibody

### PRODUCT SPECIFICATIONS

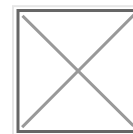
|                                                  |                                                                                                                                                                                                            |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                             | Rabbit                                                                                                                                                                                                     |
| Reactivity                                       | Human, Mouse, Rat                                                                                                                                                                                          |
| Clonality                                        | Polyclonal                                                                                                                                                                                                 |
| Isotype                                          | Rabbit IgG                                                                                                                                                                                                 |
| Specificity                                      | Rabbit IgG polyclonal antibody for PI3K-gamma/PIK3CG detection.                                                                                                                                            |
| Purity/Purification                              | Immunogen affinity purified.                                                                                                                                                                               |
| Form/Format                                      | Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.                                                                                                                     |
| Applicable Applications for anti-PIK3CG antibody | ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)                                                                                                             |
| Immunogen                                        | E Coli-derived human PI3K-gamma/PIK3CG recombinant protein (Position: K52-D308).                                                                                                                           |
| Reconstitution                                   | Add 0.2ml of distilled water will yield a concentration of 500ug/ml.                                                                                                                                       |
| Recommended Detection Systems                    | Recommended Detection Systems                                                                                                                                                                              |
| Preparation and Storage                          | Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing. |

### IMAGES



#### FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of Raji cells using anti-PI3K-gamma/PIK3CG antibody (AAA125609). Overlay histogram showing Raji cells stained with AAA125609 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PI3K-gamma/PIK3CG Antibody (AAA125609, 1µg/1x10<sup>6</sup> cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG (5-10µg/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



#### IHC (Immunohistochemistry)

Figure 2. IHC analysis of PI3K-gamma/PIK3CG using anti-PI3K-gamma/PIK3CG antibody (AAA125609). PI3K-gamma/PIK3CG was detected in paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml rabbit anti-PI3K-gamma/PIK3CG Antibody (AAA125609) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



**WB (Western Blot)**

Figure 1. Western blot analysis of PI3K-gamma/PIK3CG using anti-PI3K-gamma/PIK3CG antibody (AAA125609). 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: human K562 whole cell lysates Lane 2: human Raji whole cell lysates Lane 3: human Jurkat whole cell lysates Lane 4: human HepG2 whole cell lysates Lane 5: rat RH35 whole cell lysates Lane 6: rat PC-12 whole cell lysates Lane 7: mouse NIH/3T3 whole cell lysates Lane 8: mouse RAW264. 7 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-PI3K-gamma/PIK3CG antigen affinity purified polyclonal antibody (Catalog # AAA125609) at 0. 25 &mu;g/mL overnight at 4 degree 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 with Tanon 5200 system. A specific band was detected for PI3K-gamma/PIK3CG at approximately 126KD. The expected band size for PI3K-gamma/PIK3CG is at 126KD.

**ADDITIONAL INFORMATION**

|                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Related Product Information for anti-PIK3CG antibody</b> | Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma isoform is an enzyme that in humans is encoded by the PIK3CG gene. Phosphoinositide 3-kinases (PI3Ks) phosphorylate inositol lipids and are involved in the immune response. The protein encoded by this gene is a class I catalytic subunit of PI3K. Like other class I catalytic subunits (p110-alpha p110-beta, and p110-delta), the encoded protein binds a p85 regulatory subunit to form PI3K. This gene is located in a commonly deleted segment of chromosome 7 previously identified in myeloid leukemias. Several transcript variants encoding the same protein have been found for this gene.                                                                                               |
| <b>References</b>                                           | <div>1. Anzelon, A. N., Wu, H., Rickert, R. C. Pten inactivation alters peripheral B lymphocyte fate and reconstitutes CD19 function. Nature Immun. 4: 287-294, 2003.</div> <div>2. Barber, D. F., Bartolome, A., Hernandez, C., Flores, J. M., Redondo, C., Fernandez-Arias, C., Camps, M., Ruckle, T., Schwarz, M. K., Rodriguez, S., Martinez-A, C., Balomenos, D., Rommel, C., Carrera, A. C. PI3K-gamma inhibition blocks glomerulonephritis and extends lifespan in a mouse model of systemic lupus. Nature Med. 11: 933-935, 2005.</div> <div>3. Barbier, M., Attoub, S., Calvez, R., Laffargue, M., Jarry, A., Mareel, M., Altruda, F., Gespach, C., Wu, D., Lu, B., Hirsch, E., Wymann, M. P. Weakening link to colorectal cancer. Nature 413: 796 only, 2001.</div> |

**NCBI AND UNIPROT INFORMATION**

|                                         |                                                                                                                                                                                                                                                                 |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NCBI GI #</b>                        | 21237725                                                                                                                                                                                                                                                        |
| <b>NCBI GeneID</b>                      | 5294                                                                                                                                                                                                                                                            |
| <b>NCBI Accession #</b>                 | NP_002640.2                                                                                                                                                                                                                                                     |
| <b>NCBI GenBank Nucleotide #</b>        | NM_002649.2                                                                                                                                                                                                                                                     |
| <b>UniProt Accession #</b>              | P48736; Q8IV23; Q9BZC8; A4D0Q6                                                                                                                                                                                                                                  |
| <b>Molecular Weight</b>                 | 126,454 Da                                                                                                                                                                                                                                                      |
| <b>NCBI Official Full Name</b>          | phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit gamma isoform                                                                                                                                                                                  |
| <b>NCBI Official Synonym Full Names</b> | phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit gamma                                                                                                                                                                                         |
| <b>NCBI Official Symbol</b>             | PIK3CG                                                                                                                                                                                                                                                          |
| <b>NCBI Official Synonym Symbols</b>    | PI3K; PIK3; PI3CG; PI3Kgamma                                                                                                                                                                                                                                    |
| <b>NCBI Protein Information</b>         | phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit gamma isoform; p110gamma; p120-PI3K; PI3K-gamma; p110-gamma; PI3-kinase subunit gamma; ptdIns-3-kinase subunit gamma; 1-phosphatidylinositol 3-kinase; ptdIns-3-kinase subunit p110-gamma; ser |
| <b>UniProt Protein Name</b>             | Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit gamma isoform                                                                                                                                                                                  |

|                            |                                                                                                                               |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| UniProt Gene Name          | PIK3CG                                                                                                                        |
| UniProt Synonym Gene Names | PI3-kinase subunit gamma; PI3K-gamma; PI3Kgamma; PtdIns-3-kinase subunit gamma; PtdIns-3-kinase subunit p110-gamma; p110gamma |
| UniProt Entry Name         | PK3CG_HUMAN                                                                                                                   |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/pi3k-gamma-pik3cg-antibody-direct-elisa-flow-cytometry-immunohistochemistry-western-blot-elisa/125609>