



# LKB1 (phospho Ser334) Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-14549                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Reactivity</b>                  | Human;Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Applications</b>                | IHC;IF;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Gene Name</b>                   | STK11                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Immunogen</b>                   | The antiserum was produced against synthesized peptide derived from human LKB1 around the phosphorylation site of Ser334. AA range:300-349                                                                                                                                                                                                                                                                                                                                    |
| <b>Specificity</b>                 | Phospho-LKB1 (S334) Polyclonal Antibody detects endogenous levels of LKB1 protein only when phosphorylated at S334.                                                                                                                                                                                                                                                                                                                                                           |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                         |
| <b>Dilution</b>                    | IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Synonyms</b>                    | LKB1;STK11;STK11/ LKB1;EC:2.7.11.1;hLKB1;Serine/threonine-protein kinase STK11;PJS;Liver kinase B1;Renal carcinoma antigen NY-REN-19                                                                                                                                                                                                                                                                                                                                          |
| <b>Observed Band</b>               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Calculated Molecular Weight</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Cell Pathway</b>                | Nucleus. Cytoplasm. Membrane . Mitochondrion. A small fraction localizes at membranes (By similarity). Relocates to the cytoplasm when bound to STRAD (STRADA or STRADB) and CAB39/MO25 (CAB39/MO25alpha or CAB39L/MO25beta). Translocates to the mitochondrion during apoptosis. PTEN promotes cytoplasmic localization. .; [Isoform 2]: Nucleus . Cytoplasm . Predominantly nuclear, but translocates to the cytoplasm in response to metformin or peroxynitrite treatment. |
| <b>Tissue Specificity</b>          | Ubiquitously expressed. Strongest expression in testis and fetal liver.                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Function</b>                    | catalytic activity:ATP + a protein = ADP + a phosphoprotein., cofactor:Magnesium or manganese.,disease:Defects in STK11 are a cause of Peutz-Jeghers syndrome (PJS) [MIM:175200]. PJS is a rare hereditary disease in which there is predisposition to benign and malignant tumors of many organ systems. PJS is an autosomal dominant disorder characterized by melanocytic                                                                                                  |



macules of the lips, multiple gastrointestinal hamartomatous polyps and an increased risk for various neoplasms, including gastrointestinal cancer., disease:Defects in STK11 have been associated with testicular tumors [MIM:273300]. It includes germ cell tumor (GCT) or testicular germ cell tumor (TGCT).,enzyme regulation:Activated by binding of a complex consisting of CAB39 and STRAD or CAB39 and ALS2CR2.,function:Essential role in G1 cell cycle arrest. Phosphorylates and activates members of the AMPK-related subfamily of protein ki

**Background**

This gene, which encodes a member of the serine/threonine kinase family, regulates cell polarity and functions as a tumor suppressor. Mutations in this gene have been associated with Peutz-Jeghers syndrome, an autosomal dominant disorder characterized by the growth of polyps in the gastrointestinal tract, pigmented macules on the skin and mouth, and other neoplasms. Alternate transcriptional splice variants of this gene have been observed but have not been thoroughly characterized. [provided by RefSeq, Jul 2008],

**matters needing attention**

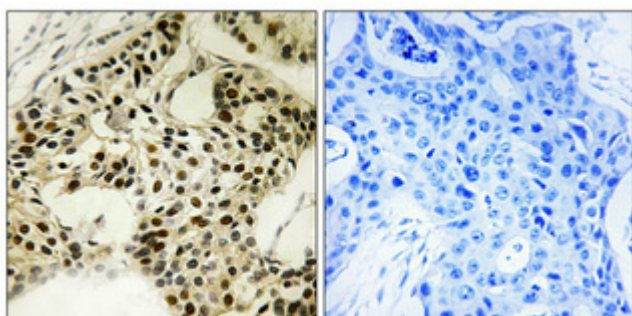
Avoid repeated freezing and thawing!

**Usage suggestions**

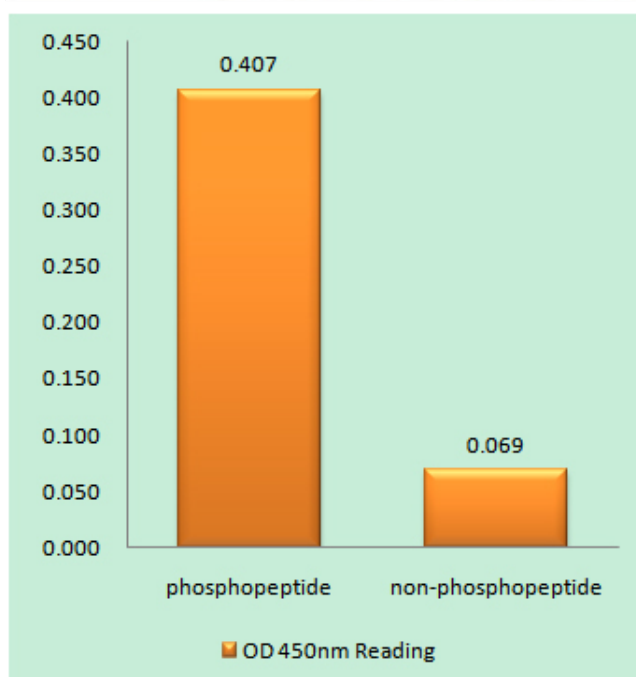
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



## Products Images



Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using LKB1 (Phospho-Ser334) Antibody



Western Blot analysis of COS cell lysis treated by UV.  
Primary Antibody was diluted at 1:1000. Secondary  
antibody(catalog#:RS23920 was diluted at 1:10000

