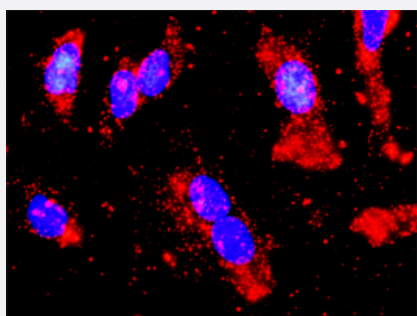


STK11 & PRKAA2 Protein Protein Interaction Antibody Pair

Catalog # DI0500

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between STK11 and PRKAA2. HeLa cells were stained with anti-STK11 rabbit purified polyclonal antibody 1:1200 and anti-PRKAA2 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Specification

Product Description

This protein protein interaction antibody pair set comes with two antibodies to detect the protein-protein interaction, one against the STK11 protein, and the other against the PRKAA2 protein for use in [in situ Proximity Ligation Assay](#). [See Publication Reference below](#).

Reactivity

Human

Quality Control Testing

Protein protein interaction immunofluorescence result.
Representative image of Proximity Ligation Assay of protein-protein interactions between STK11 and PRKAA2. HeLa cells were stained with anti-STK11 rabbit purified polyclonal antibody 1:1200 and anti-PRKAA2 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Supplied Product

Antibody pair set content:
1. STK11 rabbit purified polyclonal antibody (100 ug)
2. PRKAA2 mouse monoclonal antibody (40 ug)
*Reagents are sufficient for at least 30-50 assays using recommended protocols.

Storage Instruction

Store reagents of the antibody pair set at -20°C or lower. Please aliquot to avoid repeated freeze-thaw cycle. Reagents should be returned to -20°C storage immediately after use.

Applications

- *In situ* Proximity Ligation Assay (Cell)

Gene Info — PRKAA2

Entrez GeneID [5563](#)

Gene Name PRKAA2

Gene Alias AMPK, AMPK2, PRKAA

Gene Description protein kinase, AMP-activated, alpha 2 catalytic subunit

Omim ID [600497](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The protein encoded by this gene is a catalytic subunit of the AMP-activated protein kinase (AMP K). AMPK is a heterotrimer consisting of an alpha catalytic subunit, and non-catalytic beta and gamma subunits. AMPK is an important energy-sensing enzyme that monitors cellular energy status. In response to cellular metabolic stresses, AMPK is activated, and thus phosphorylates and inactivates acetyl-CoA carboxylase (ACC) and beta-hydroxy beta-methylglutaryl-CoA reductase (HMG CR), key enzymes involved in regulating de novo biosynthesis of fatty acid and cholesterol. Studies of the mouse counterpart suggest that this catalytic subunit may control whole-body insulin sensitivity and is necessary for maintaining myocardial energy homeostasis during ischemia. [provided by RefSeq]

Other Designations

5'-AMP-activated protein kinase, catalytic alpha-2 chain|AMP-activated protein kinase alpha 2 catalytic subunit|AMPK-alpha-2 chain|OTTHUMP0000009993

Gene Info — STK11

Entrez GeneID [6794](#)

Gene Name STK11

Gene Alias LKB1, PJS

Gene Description serine/threonine kinase 11

Omim ID [175200](#) [273300](#) [602216](#)

Gene Ontology [Hyperlink](#)

Gene Summary

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]

Other Designations

polarization-related protein LKB1|serine/threonine protein kinase 11

Pathway

- [Adipocytokine signaling pathway](#)
- [Adipocytokine signaling pathway](#)
- [Hypertrophic cardiomyopathy \(HCM\)](#)
- [Insulin signaling pathway](#)
- [mTOR signaling pathway](#)
- [mTOR signaling pathway](#)
- [Regulation of autophagy](#)

Disease

- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Atherosclerosis](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Colonic Neoplasms](#)

- [Colonic Polyps](#)
- [Coronary Artery Disease](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Drug Toxicity](#)
- [Edema](#)
- [Gastrointestinal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Hyperandrogenism](#)
- [Hypercholesterolemia](#)
- [Hyperinsulinism](#)
- [Insulin Resistance](#)
- [Insulin Resistance](#)
- [Long QT syndrome](#)
- [Lung Neoplasms](#)
- [Metabolic Syndrome X](#)
- [Neoplasms](#)
- [Osteoporosis](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Peutz-Jeghers Syndrome](#)
- [Polycystic Ovary Syndrome](#)
- [Pulmonary Disease](#)
- [Torsades de Pointes](#)

- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)