

Bioactive

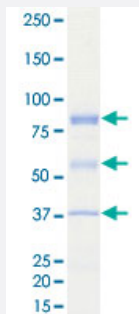
Full-Length

STK11/CAB39/STRADA (Human) Recombinant Protein

Catalog # P5577

Size 5 ug

Applications



Result of activity analysis

Result of activity analysis

□

Specification

Product Description	Human STK11 (NP_000446.1, 1 a.a. - 433 a.a.) and CAB39 (NP_057373.1, 1 a.a. - 341 a.a.) and STRADA (NP_001003787.1, 1 a.a. - 431 a.a.) full-length recombinant protein with GST tag expressed in baculovirus infected Sf21 cells.
Host	insect
Theoretical MW (kDa)	75
Form	Liquid
Preparation Method	Baculovirus infected insect cell (Sf21) expression system
Purification	Glutathione sepharose chromatography

Purity	97 % by SDS-PAGE/CBB staining
Activity	The activity was determined by ELISA. The enzyme was incubated with biotinylated substrate protein /peptide, and after stopping kinase reaction by EDTA, the reaction solution was transferred into strep tavidin-coated plate. Phosphorylation was detected by anti- phospho antibody and HRP-labeled anti-rabbit IgG. Substrate: LKBtide. ATP: 100 uM.
Quality Control Testing	Loading 1 ug protein in SDS-PAGE
Storage Buffer	In 50 mM Tris-HCl, 150 mM NaCl, pH 7.5 (0.1% CHAPS, 1 mM DTT, 10% glycerol)
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis

Applications

- Functional Study
- SDS-PAGE

Gene Info — STK11

Entrez GeneID	6794
Protein Accession#	NP_000446.1 (Gene ID : 6794);NP_057373.1 (Gene ID : 51719);NP_001003787.1 (Gene ID : 92335)
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-Jeg hers syndrome, an autosomal dominant disorder characterized by the growth of polyps in the gast rointestinal tract, pigmented macules on the skin and mouth, and other neoplasms. Alternate trans criptional splice variants of this gene have been observed but have not been thoroughly characteri zed. [provided by RefSeq

Other Designations

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

Gene Info — CAB39

Entrez GeneID	51719
Protein Accession#	NP_000446.1 (Gene ID : 6794);NP_057373.1 (Gene ID : 51719);NP_001003787.1 (Gene ID : 92335)
Gene Name	CAB39
Gene Alias	CGI-66, FLJ22682, MO25
Gene Description	calcium binding protein 39
Gene Ontology	Hyperlink
Other Designations	-

Gene Info — STRADA

Entrez GeneID	92335
Protein Accession#	NP_000446.1 (Gene ID : 6794);NP_057373.1 (Gene ID : 51719);NP_001003787.1 (Gene ID : 92335)
Gene Name	STRADA
Gene Alias	FLJ90524, LYK5, NY-BR-96, PMSE, STRAD, Stlk
Gene Description	STE20-related kinase adaptor alpha
Omim ID	608626 611087
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene contains a STE20-like kinase domain, but lacks several residues that are critical for catalytic activity, so it is termed a 'pseudokinase'. The protein forms a heterotrimeric complex with serine/threonine kinase 11 (STK11, also known as LKB1) and the scaffolding protein calcium binding protein 39 (CAB39, also known as MO25). The protein activates STK11 leading to the phosphorylation of both proteins and excluding STK11 from the nucleus. The protein is necessary for STK11-induced G1 cell cycle arrest. A mutation in this gene has been shown to result in polyhydramnios, megalencephaly, and symptomatic epilepsy (PMSE) syndrome. Multiple transcript variants encoding different isoforms have been found for this gene. Additional transcript variants have been described but their full-length nature is not known. [provided by RefSeq]
Other Designations	STE20-like pseudokinase STE20-related adaptor protein protein kinase LYK5

Pathway

- [Adipocytokine signaling pathway](#)
- [mTOR signaling pathway](#)
- [mTOR signaling pathway](#)
- [mTOR signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Colonic Neoplasms](#)
- [Colonic Polyps](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Gastrointestinal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Hyperandrogenism](#)
- [Hyperinsulinism](#)
- [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](#)