

STRAD (M-19): sc-55052

BACKGROUND

Peutz-Jeghers Syndrome (PJS) is a rare hereditary disease characterized by melanocytic macules of the lips, gastrointestinal hamartomatous polyps and an increased risk for many classes of cancer. The serine/threonine kinase LKB1 (also designated STK11) has been identified as the gene mutated in PJS. LKB1 activity increases upon the binding of a regulatory complex consisting of the STE20-related adaptor- α (STRAD α) pseudo kinase and the calcium binding protein 39 (MO25 α). STRAD determines the subcellular localization of LKB1 by initiating its translocation from the nucleus to the cytoplasm, thus regulating the tumor suppressor activity of LKB1.

REFERENCES

1. Jenne, D.E., et al. 1998. Peutz-Jeghers syndrome is caused by mutations in a novel serine/threonine kinase. *Nat. Genet.* 18: 38-43.
2. Hemminki, A., et al. 1998. A serine/threonine kinase gene defective in Peutz-Jeghers syndrome. *Nature* 391: 184-187.

CHROMOSOMAL LOCATION

Genetic locus: STRADA (human) mapping to 17q23.3; Strada (mouse) mapping to 11 E1.

SOURCE

STRAD (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of STRAD of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-55052 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

STRAD (M-19) is recommended for detection of STRAD of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

STRAD (M-19) is also recommended for detection of STRAD in additional species, including canine and bovine.

Suitable for use as control antibody for STRAD siRNA (h): sc-45241, STRAD siRNA (m): sc-63087, STRAD shRNA Plasmid (h): sc-45241-SH, STRAD shRNA Plasmid (m): sc-63087-SH, STRAD shRNA (h) Lentiviral Particles: sc-45241-V and STRAD shRNA (m) Lentiviral Particles: sc-63087-V.

Molecular Weight (predicted) of STRAD: 48 kDa.

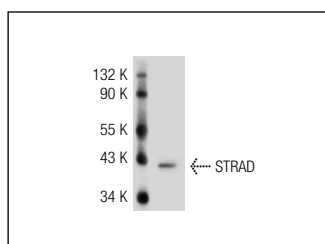
Molecular Weight (observed) of STRAD: 40-45 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

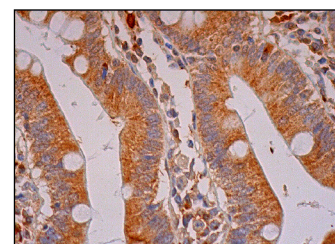
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



STRAD (M-19): sc-55052. Western blot analysis of STRAD expression in 293T whole cell lysate.



STRAD (M-19): sc-55052. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of myocytes.

SELECT PRODUCT CITATIONS

1. Son, Y.O., et al. 2011. Cadmium induces autophagy through ROS-dependent activation of the LKB1-AMPK signaling in skin epidermal cells. *Toxicol. Appl. Pharmacol.* 255: 287-296.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **STRAD (4E4): sc-293230**, our highly recommended monoclonal alternative to STRAD (M-19).