

ILKAP (G-12): sc-161737

BACKGROUND

ILKAP (integrin-linked kinase-associated serine/threonine phosphatase 2C), also known as PP2C δ , is a 392 amino acid cytoplasmic protein phosphatase that selectively interacts with integrin linked kinase (ILK) to regulate growth factor signaling and cell adhesion. While widely expressed, ILKAP is found at highest levels in striated muscle with lower levels found in smooth muscle. ILKAP belongs to the PP2C family and contains one PP2C-like domain. ILKAP has been suggested to inhibit oncogenic transformation and the ILK-GSK3 β signaling axis, and can bind two magnesium or manganese ions per subunit as cofactors. The gene encoding ILKAP maps to human chromosome 2, which consists of 237 million bases encoding over 1,400 genes and making up approximately 8% of the human genome.

REFERENCES

1. Tong, Y., et al. 1998. Cloning and characterization of a novel mammalian PP2C isozyme. *J. Biol. Chem.* 273: 35282-35290.
2. Leung-Hagesteijn, C., et al. 2001. Modulation of integrin signal transduction by ILKAP, a protein phosphatase 2C associating with the integrin-linked kinase, ILK1. *EMBO J.* 20: 2160-2170.

CHROMOSOMAL LOCATION

Genetic locus: ILKAP (human) mapping to 2q37.3; Ilkap (mouse) mapping to 1 D.

SOURCE

ILKAP (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ILKAP of human 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-161737 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ILKAP (G-12) is recommended for detection of ILKAP 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ILKAP (G-12) is also recommended for detection of ILKAP in additional species, including porcine, canine and bovine.

Suitable for use as control antibody for ILKAP siRNA (h): sc-94868, ILKAP siRNA (m): sc-146223, ILKAP shRNA Plasmid (h): sc-94868-SH, ILKAP shRNA Plasmid (m): sc-146223-SH, ILKAP shRNA (h) Lentiviral Particles: sc-94868-V and ILKAP shRNA (m) Lentiviral Particles: sc-146223-V.

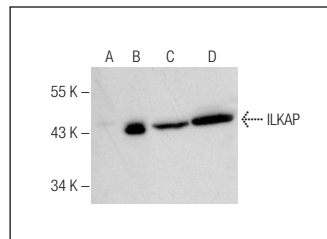
Molecular Weight of ILKAP: 47 kDa.

Positive Controls: rat brain extract: sc-2392, mouse brain extract: sc-2253 or ILKAP (h3): 293T Lysate: sc-177387.

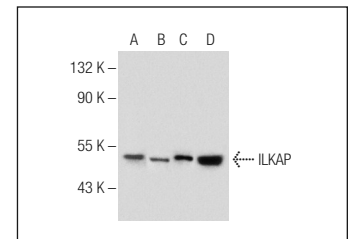
RECOMMENDED SECONDARY REAGENTS

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.

DATA



ILKAP (G-12): sc-161737. Western blot analysis of ILKAP expression in non-transfected: sc-117752 (A) and human ILKAP transfected: sc-177387 (B) 293T whole cell lysates and rat brain (C) and rat skeletal muscle (D) tissue extracts.



ILKAP (G-12): sc-161737. Western blot analysis of ILKAP expression in HeLa (A) and WI 38 (B) whole cell lysates and mouse prostate (C) and mouse brain (D) tissue extracts.

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 **ILKAP (41): sc-136341**, our highly recommended monoclonal alternative to ILKAP (G-12).