SANTA CRUZ BIOTECHNOLOGY, INC.

ELKS (C-17): sc-47875

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The glutamine, leucine, lysine and serine-rich protein ELKS, also designated Rab6-interacting protein 2 and CAZ-associated structural protein (CAST) or the acronym ERC, is a member of a family of RIM-binding proteins. RIMs are presynaptic active zone proteins that regulate neurotransmitter release. This class of protein functions by recruiting IκBα to the IκB kinase (IKK) complex, and thus serves a regulatory function for IKK activation. Five isoforms of ELKS (α, β, γ, δ and ε) exist and have multiple coding region differences and distinct C-termini. Only brain-specific ELKS bind to RIMs, but both ubiquitous and brain-specific ELKS bind to Rab6, a GTP-binding protein involved in membrane traffic at the Golgi complex. Fusion of ELKS to RET due to translocation t(10;12)(q11;p13) results in a papillary thyroid carcinoma.

CHROMOSOMAL LOCATION

Genetic locus: ERC1 (human) mapping to 12p13.33; Erc1 (mouse) mapping to 6 F1.

SOURCE

ELKS (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ELKS of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-47875 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-47875 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

ELKS (C-17) is recommended for detection of ELKS of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

ELKS (C-17) is also recommended for detection of ELKS in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ELKS siRNA (h): sc-60572, ELKS siRNA (m): sc-60573, ELKS shRNA Plasmid (h): sc-60572-SH, ELKS shRNA Plasmid (m): sc-60573-SH, ELKS shRNA (h) Lentiviral Particles: sc-60572-V and ELKS shRNA (m) Lentiviral Particles: sc-60573-V.

ELKS (C-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

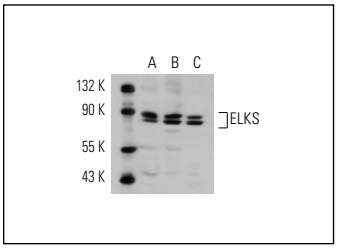
Molecular Weight of ELKS: 94 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285, SW480 cell lysate: sc-2219 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

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



ELKS (C-17): sc-47875. Western blot analysis of ELKS expression in MIA PaCa-2 (**A**), NTERA-2 cl. D1 (**B**) and SW480 (**C**) whole cell lysates.

STORAGE

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

PROTOCOLS

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

MONOS Satisfaction Guaranteed

Try **ELKS (G-10): sc-515041** or **ELKS (E-1): sc-365715**, our highly recommended monoclonal alternatives to ELKS (C-17).