

KRAP (T-15): sc-161104

BACKGROUND

Mammalian sperm flagellum contain two cytoskeletal structures associated with the the axoneme: the outer dense fibers and the fibrous sheath. The outer dense fibers surround the axoneme in the midpiece and principal piece, whereas the fibrous sheath surrounds outer dense fibers of the tail of the principal piece. KRAP (ki-ras-induced actin-interacting protein), also known as CS1, CS-1, SPAG13 or SSFA2 (sperm specific antigen 2), is a 1,259 amino acid cytoplasmic protein strongly expressed in pancreas and testis. Localized to the plasma membrane, KRAP may be involved in the regulation of filamentous actin and extracellular signaling. It is also suggested that KRAP may participate in structural integrity or signal transductions in human cancers. KRAP deficient mice have enhanced metabolic rate, decreased adiposity, improved glucose tolerance, hypoinsulinemia and hypoleptinemia, which suggest KRAP may be a novel regulator in body energy homeostasis and a therapeutic target for obesity and related diseases.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SSFA2 (human) mapping to 2q31.3; Ssfa2 (mouse) mapping to 2 C3.

SOURCE

KRAP (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KRAP of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-161104 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

KRAP (T-15) is recommended for detection of KRAP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

KRAP (T-15) is also recommended for detection of KRAP in additional species, including equine.

Suitable for use as control antibody for KRAP siRNA (h): sc-94670, KRAP siRNA (m): sc-146565, KRAP shRNA Plasmid (h): sc-94670-SH, KRAP shRNA Plasmid (m): sc-146565-SH, KRAP shRNA (h) Lentiviral Particles: sc-94670-V and KRAP shRNA (m) Lentiviral Particles: sc-146565-V.

Molecular Weight of KRAP: 180 kDa.

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) 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.

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.