

Ska2 (S-13): sc-136868

BACKGROUND

Ska2 (spindle and kinetochore associated complex subunit 2), also known as FAM33A, is a 121 amino acid component of the Ska1 complex, a microtubule-binding subcomplex of the outer kinetochore that is critical for proper chromosome segregation. The Ska1 complex is a component of the kinetochore-microtubule interface and directly associates with microtubules as oligomeric assemblies. Localized to the outer kinetochore and spindle microtubules during cell proliferation, Ska2 is essential for spindle checkpoint silencing and exit from mitosis. Downregulation of Ska2 leads to delayed recruitment of MAD2, a component of the mitotic spindle checkpoint, to several kinetochores resulting in occasional loss of individual chromosomes from the metaphase plate. Ska2 is encoded by a gene located on human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes.

REFERENCES

- Hanisch, A., et al. 2006. Timely anaphase onset requires a novel spindle and kinetochore complex comprising Ska1 and Ska2. *EMBO J.* 25: 5504-5515.
- Wang, C. and St Leger, R.J. 2007. The MAD1 adhesin of *Metarhizium anisopliae* links adhesion with blastospore production and virulence to insects, and the MAD2 adhesin enables attachment to plants. *Eukaryot. Cell* 6: 808-816.
- Rice, L., et al. 2008. Identification and functional analysis of Ska2 interaction with the glucocorticoid receptor. *J. Endocrinol.* 198: 499-509.
- Daub, H., et al. 2008. Kinase-selective enrichment enables quantitative phosphoproteomics of the kinome across the cell cycle. *Mol. Cell* 31: 438-448.

CHROMOSOMAL LOCATION

Genetic locus: SKA2 (human) mapping to 17q22; Ska2 (mouse) mapping to 11 C.

SOURCE

Ska2 (S-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of Ska2 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.

Blocking peptide available for competition studies, sc-136868 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

Ska2 (S-13) is recommended for detection of Ska2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with Ska1 family members.

Suitable for use as control antibody for Ska2 siRNA (h): sc-94176, Ska2 siRNA (m): sc-153474, Ska2 shRNA Plasmid (h): sc-94176-SH, Ska2 shRNA Plasmid (m): sc-153474-SH, Ska2 shRNA (h) Lentiviral Particles: sc-94176-V and Ska2 shRNA (m) Lentiviral Particles: sc-153474-V.

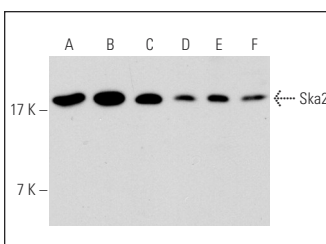
Molecular Weight of Ska2: 18 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, 3T3-L1 cell lysate: sc-2243 or A549 cell lysate: sc-2413.

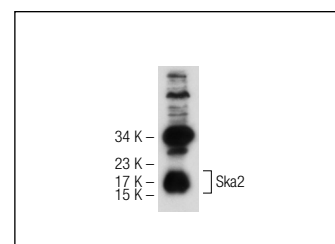
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Ska2 (S-13): sc-136868. Western blot analysis of Ska2 expression in NIH/3T3 (A), 3T3-L1 (B), A549 (C) and Jurkat (D) whole cell lysates and MCF7 (E) and HeLa (F) nuclear extracts.



Ska2 (S-13): sc-136868. Western blot analysis of Ska2 expression in mouse brain tissue extract.

PROTOCOLS

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

MONOS
Satisfaction
Guaranteed

Try **Ska2 (H-2): sc-514495**, our highly recommended monoclonal alternative to Ska2 (S-13).