SANTA CRUZ BIOTECHNOLOGY, INC.

UNCX (K-18): sc-249230

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Members of the paired homeobox family play a role in regulating cell development and pattern formation during embryonic stages. UNCX (UNC homeobox), also known as UNCX4.1, is a 531 amino acid nuclear transcription factor involved in neurogenesis and somitogenesis. Containing one homeobox DNA-binding domain, UNCX belongs to the paired homeobox family and UNC4 subfamily. UNCX assists in the formation of connections between hypothalamic neurons and the pituitary, which is necessary for central neurons to deliver hormones into peripheral blood. UNCX also plays a role in maintaining differentiation of the axial skeleton and acts upstream of Pax-9. The gene encoding UNCX maps to human chromosome 7, which houses over 1,000 genes and comprises nearly 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome.

REFERENCES

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7. Asbreuk, C.H., et al. 2006. Neurohypophysial dysmorphogenesis in mice lacking the homeobox gene Uncx4.1. J. Mol. Endocrinol. 36: 65-71.
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CHROMOSOMAL LOCATION

Genetic locus: UNCX (human) mapping to 7p22.3; Uncx (mouse) mapping to 5 G2.

RESEARCH USE

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

SOURCE

UNCX (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UNCX of human origin.

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-249230 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UNCX (K-18) is recommended for detection of UNCX 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); non cross-reactive with other UNC family members.

UNCX (K-18) is also recommended for detection of UNCX in additional species, including canine.

Suitable for use as control antibody for UNCX siRNA (m): sc-154925, UNCX shRNA Plasmid (m): sc-154925-SH and UNCX shRNA (m) Lentiviral Particles: sc-154925-V.

Molecular Weight (predicted) of UNCX: 54 kDa.

Molecular Weight (observed) of UNCX: 62 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) 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.

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.