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βENaC (h3): 293T Lysate: sc-177183

BACKGROUND

The epithelial sodium channel (ENaC) is a member of the ENaC/DEG superfamily that is located on the apical surface of cells. ENaC mediates sodium reabsorption in kidney, distal colon, lung, ducts of exocrine glands, and other organs. ENaC is formed by heteromultimerization of four homologous subunits, α , β , γ and δ . The most frequently formed heterotetramer consists of 2 α , 1 β , and 1 γ subunit, but the α subunit can be replaced by a δ subunit. The α ENaC gene maps to human chromosome 12p13.31, and expresses a glycosylated protein. Both the β and γ ENaC genes map to human chromosome 16p12.1, and the γ ENaC transcript is detected as a glycosylated protein. The carboxy-terminus of all ENaC subunits contains PY motifs, which interact with the ubiquitin protein ligase, Nedd4, to regulate intracellular sodium concentrations. Gain-of-function mutations involving the PY motif cause Liddle's syndrome, an autosomal dominant form of hypertension, resulting from excessive renal sodium absorption. Conversely, ENaC loss-of-function mutations result in pseudohypoaldosteronism type I, a disorder characterized by salt wasting and hypotension.

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CHROMOSOMAL LOCATION

Genetic locus: SCNN1B (human) mapping to 16p12.2.

PRODUCT

βENaC (h3): 293T Lysate represents a lysate of human βENaC transfected 293T cells and is provided as 100 μg protein in 200 μl SDS-PAGE buffer.

APPLICATIONS

βENaC (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive βENaC antibodies. Recommended use: 10-20 μl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.