

EPI64 (m): 293T Lysate: sc-125303

BACKGROUND

The Na⁺/H⁺ exchange protein (NHE) functions in transepithelial Na⁺ absorption and is primarily expressed in the intestinal and renal brush border membrane. NHE regulatory factor 1 (NHERF-1) interacts with NHE through two PDZ (for PSD-95, discs-large, and ZO-1 homology) domains, which are protein-protein interaction modules that associate with specific C-terminal motifs on target proteins. Also known as EBP50, NHERF-1 facilitates cAMP inhibition of NHE to decrease Na⁺ adsorption. NHERF-2, also known as E3KARP, is ubiquitously expressed as a protein which also functions in NHE-2 regulation. EBP-PDZ interactor (EPI64) contains a C-terminal -DTYL sequence that binds to the first PDZ domain of NHERF-1 and NHERF-2. EPI64 is ubiquitously expressed and localizes with NHERF-1 *in vitro*. The gene encoding human EPI64 maps to chromosome 22q12.2.

REFERENCES

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5. Reczek, D. and Bretscher, A. 2001. Identification of EPI64, a TBC/RabGAP domain-containing microvillar protein that binds to the first PDZ domain of EBP50 and E3KARP. *J. Cell Biol.* 153: 191-205.

CHROMOSOMAL LOCATION

Genetic locus: Tbc1d10a (mouse) mapping to 11 A1.

PRODUCT

EPI64 (m): 293T Lysate represents a lysate of mouse EPI64 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

EPI64 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive EPI64 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.