

# EPI64 (M-120): sc-33617

## BACKGROUND

The Na<sup>+</sup>/H<sup>+</sup> exchange protein (NHE) functions in transepithelial Na<sup>+</sup> 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<sup>+</sup> adsorption. NHERF-2, also known as E3KARP, is ubiquitously expressed as a protein which also functions in NHE2 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 22q12.1-qter.

## REFERENCES

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- Poulat, F., de Santa Barbara, P., Desclozeaux, M., Soullier, S., Moniot, B., Bonneaud, N., Boizet, B. and Berta, P. 1997. The human testis determining factor SRY bind a nuclear factor containing PDZ protein interaction domains. *J. Biol. Chem.* 272: 7167-7172.
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## CHROMOSOMAL LOCATION

Genetic locus: TBC1D10A (human) mapping to 22q12.1; Tbc1d10a (mouse) mapping to 11 A1.

## SOURCE

EPI64 (M-120) is a rabbit polyclonal antibody raised against amino acids 381-500 mapping at the C-terminus of EPI64 of mouse origin.

## PRODUCT

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

## STORAGE

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

## APPLICATIONS

EPI64 (M-120) is recommended for detection of EPI64 of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1–2 µg per 100–500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:300).

Suitable for use as control antibody for EPI64 siRNA (h): sc-42520, EPI64 siRNA (m): sc-42521, EPI64 shRNA Plasmid (h): sc-42520-SH, EPI64 shRNA Plasmid (m): sc-42521-SH, EPI64 shRNA (h) Lentiviral Particles: sc-42520-V and EPI64 shRNA (m) Lentiviral Particles: sc-42521-V.

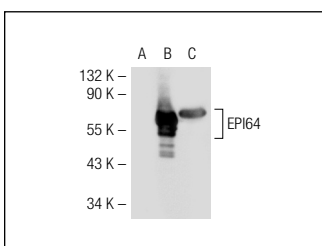
Molecular Weight of EPI64: 56 kDa.

Positive Controls: mouse embryo extract or EPI64 (m3): 293T Lysate: sc-110216.

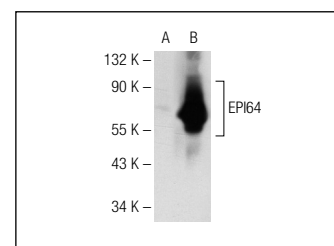
## RECOMMENDED SECONDARY REAGENTS

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



EPI64 (M-120): sc-33617. Western blot analysis of EPI64 expression in non-transfected: sc-117752 (A) and mouse EPI64 transfected: sc-125304 (B) 293T whole cell lysates and mouse embryo tissue extract (C).



EPI64 (M-120): sc-33617. Western blot analysis of EPI64 expression in non-transfected: sc-117752 (A) and mouse EPI64 transfected: sc-110216 (B) 293T whole cell lysates.

## RESEARCH USE

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

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Try **EPI64 (34): sc-136520** or **EPI64 (B-9): sc-376991**, our highly recommended monoclonal alternatives to EPI64 (M-120).