SLC4A1AP (49): sc-136069



The Power to Question

BACKGROUND

Solute carrier family 4 anion exchanger member 1 adapter protein (SLC4A1AP), also designated kanadaptin or human lung cancer oncogene 3 protein (HLC-3), is a 796 amino acid protein that is widely expressed in many tissues, including kidney, lung, liver, brain and skeletal and cardiac muscle. SLC4A1AP is a multidomain protein that localizes to the nucleus where it may play a role in signaling. SLC4A1AP was previously thought to act as an adaptor protein or chaperone involved in targeting kAE1 to the plasma membrane. However, recent studies suggest SLC4A1AP does not interact with kAE1. The gene encoding SLC4A1AP maps to chromosome 2, which consists of 237 million bases and makes up approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2, including Harlequin icthyosis, sitosterolemia and Alström syndrome.

REFERENCES

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- 3. Hübner, S., et al. 2003. Mitochondrial and nuclear localization of kanadaptin. Eur. J. Cell Biol. 82: 240-252.
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- Marshall, J.D., et al. 2007. Spectrum of ALMS1 variants and evaluation of genotype-phenotype correlations in Alström syndrome. Hum. Mutat. 28: 1114-1123.

CHROMOSOMAL LOCATION

Genetic locus: SLC4A1AP (human) mapping to 2p23.3; Slc4a1ap (mouse) mapping to 5 B1.

SOURCE

SLC4A1AP (49) is a mouse monoclonal antibody raised against amino acids 60-171 of SLC4A1AP of mouse origin.

PRODUCT

Each vial contains 200 $\mu g \; lg G_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SLC4A1AP (49) is recommended for detection of SLC4A1AP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for SLC4A1AP siRNA (h): sc-94489, SLC4A1AP siRNA (m): sc-153567, SLC4A1AP shRNA Plasmid (h): sc-94489-SH, SLC4A1AP shRNA Plasmid (m): sc-153567-SH, SLC4A1AP shRNA (h) Lentiviral Particles: sc-94489-V and SLC4A1AP shRNA (m) Lentiviral Particles: sc-153567-V.

Molecular Weight (predicted) of SLC4A1AP: 89 kDa.

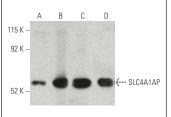
Molecular Weight (observed) of SLC4A1AP: 57 kDa.

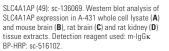
Positive Controls: A-431 whole cell lysate: sc-2201, rat kidney extract: sc-2394 or rat brain extract: sc-2392.

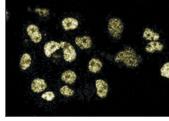
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-lgG κ BP-FITC: sc-516140 or m-lgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA







SLC4A1AP (49): sc-136069. Immunofluorescence staining of A-431 cells showing nuclear staining.

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. Not for resale.