Na\textsuperscript{+}/K\textsuperscript{+}-ATPase α1 (C464.6): sc-21712

**BACKGROUND**

The ubiquitously expressed sodium/potassium-ATPase (Na\textsuperscript{+}/K\textsuperscript{+}-ATPase) exists as an oligomeric plasma membrane complex that couples the hydrolysis of one molecule of ATP to the importation of three Na\textsuperscript{+} ions and two K\textsuperscript{+} ions against their respective electrochemical gradients. As a member of the P-type family of ion motives, Na\textsuperscript{+}/K\textsuperscript{+}-ATPase plays a critical role in maintaining cellular Na\textsuperscript{+}/K\textsuperscript{+}-ATPase.

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**SOURCE**

Na\textsuperscript{+}/K\textsuperscript{+}-ATPase α1 (C464.6) is a mouse monoclonal antibody raised against purified renal outer medulla of rabbit origin.

**PRODUCT**

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

Na\textsuperscript{+}/K\textsuperscript{+}-ATPase α1 (C464.6) is available conjugated to agarose (sc-21712 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-21712 HRP), 200 µg/ml, for WB, (HCP) and ELISA; to either phycoerythrin (sc-21712 PE), fluorescein (sc-21712 FITC), Alexa Fluor® 488 (sc-21712 AF488), Alexa Fluor® 594 (sc-21712 AF594) or Alexa Fluor® 647 (sc-21712 AF647), 200 µg/ml, for IF, IHC and FCM; and to either Alexa Fluor® 680 (sc-21712 AF680) or Alexa Fluor® 790 (sc-21712 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

Na\textsuperscript{+}/K\textsuperscript{+}-ATPase α1 (C464.6) is recommended for detection of Na\textsuperscript{+}/K\textsuperscript{+}-ATPase α1 of broad species origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µl of total protein) (1 ml of cell lysate), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Na\textsuperscript{+}/K\textsuperscript{+}-ATPase α1 shRNA (h): sc-36010, Na\textsuperscript{+}/K\textsuperscript{+}-ATPase α1 siRNA (m): sc-36011, Na\textsuperscript{+}/K\textsuperscript{+}-ATPase α1 shRNA Plasmid (h): sc-36010-SH, Na\textsuperscript{+}/K\textsuperscript{+}-ATPase α1 shRNA Plasmid (m): sc-36011-SH, Na\textsuperscript{+}/K\textsuperscript{+}-ATPase α1 shRNA (h) Lentiviral Particles: sc-36010-V and Na\textsuperscript{+}/K\textsuperscript{+}-ATPase α1 shRNA (m) Lentiviral Particles: sc-36011-V.

Molecular Weight of Na\textsuperscript{+}/K\textsuperscript{+}-ATPase α1: 100 kDa.

**CHROMOSOMAL LOCATION**

Genetic locus: ATP1A1 (human) mapping to 1p13.1; Atp1a1 (mouse) mapping to chromosome 10.

**DATA**

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.

**SELECT PRODUCT CITATIONS**


