

AKAP 95 (47): sc-135828

BACKGROUND

The type II cAMP-protein kinase (PKA) is a multifunctional kinase with a broad range of substrates. Specificity of PKA signaling is thought to be mediated by the compartmentalization of the kinase to specific sites within the cell. To maintain this specific localization, the R subunit (RII) of PKA interacts with specific RII-anchoring proteins. The family of RII-anchoring proteins has been designated A-kinase anchoring proteins (AKAP). AKAP 95, also known as AKAP 8, is a nuclear matrix protein predominantly expressed in liver, heart, pancreas, kidney and skeletal muscle. During mitosis, AKAP 95 is recruited to the chromosomes and plays an essential role in mitotic progression. Characteristic of its family, AKAP 95 participates in PKA signaling through an interaction with the RII regulatory subunit. In addition, AKAP 95 forms a complex with HA95 and HDAC3 and is required for the deacetylation of Histone H3 in mitosis.

REFERENCES

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STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: AKAP8 (human) mapping to 19p13.12.

SOURCE

AKAP 95 (47) is a mouse monoclonal antibody raised against amino acids 460-781 of AKAP 95 of human origin.

PRODUCT

Each vial contains 50 µg IgG_{2b} in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

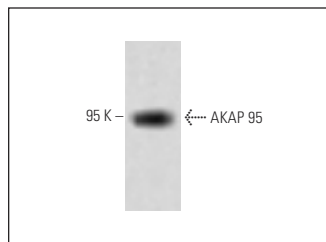
AKAP 95 (47) is recommended for detection of AKAP 95 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for AKAP 95 siRNA (h): sc-29662, AKAP 95 shRNA Plasmid (h): sc-29662-SH and AKAP 95 shRNA (h) Lentiviral Particles: sc-29662-V.

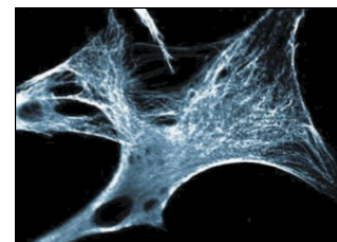
Molecular Weight of AKAP 95: 95 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

DATA



AKAP 95 (47): sc-135828. Western blot analysis of AKAP 95 expression in Jurkat whole cell lysate.



AKAP 95 (47): sc-135828. Immunofluorescence staining of Fh3 738 cells showing cytoplasmic localization.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.