

# AKAP 8L (C-12): sc-132213

## 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 8, also known as AKAP 95, is a nuclear matrix protein predominantly expressed in liver, heart, pancreas, kidney and skeletal muscle. During mitosis, AKAP 8 is recruited to the chromosomes and plays an essential role in mitotic progression. AKAP 8L (AKAP 8-like), also known as HA95 (homologous to AKAP 95 protein), HAP95 (helicase A-binding protein 95), NAKAP or NAKAP95 (neighbor of AKAP 95), is also a nuclear matrix protein and shares 61% homology and 30% identity with AKAP 8. In addition, AKAP 8L forms a complex with AKAP 8 and HDAC3 and is required for the deacetylation of Histone H3 in mitosis.

## REFERENCES

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- Collas, P., et al. 1999. The A-kinase-anchoring protein AKAP95 is a multi-valent protein with a key role in chromatin condensation at mitosis. *J. Cell Biol.* 147: 1167-1180.
- Orstavik, S., et al. 2000. Identification, cloning and characterization of a novel nuclear protein, HA95, homologous to A-kinase anchoring protein 95. *Biol. Cell* 92: 27-37.
- Westberg, C., et al. 2000. A novel shuttle protein binds to RNA helicase A and activates the retroviral constitutive transport element. *J. Biol. Chem.* 275: 21396-21401.
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- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609475. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: AKAP8L (human) mapping to 19p13.12; Akap8l (mouse) mapping to 17 B1.

## SOURCE

AKAP 8L (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of AKAP 8L of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-132213 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

AKAP 8L (C-12) is recommended for detection of AKAP 8L of mouse, rat and 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 1:30-1:3000); non cross-reactive with AKAP 8.

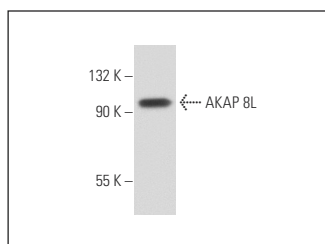
AKAP 8L (C-12) is also recommended for detection of AKAP 8L in additional species, including porcine.

Suitable for use as control antibody for AKAP 8L siRNA (h): sc-97872, AKAP 8L siRNA (m): sc-140978, AKAP 8L shRNA Plasmid (h): sc-97872-SH, AKAP 8L shRNA Plasmid (m): sc-140978-SH, AKAP 8L shRNA (h) Lentiviral Particles: sc-97872-V and AKAP 8L shRNA (m) Lentiviral Particles: sc-140978-V.

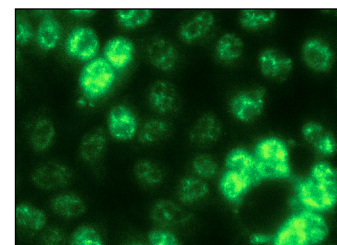
Molecular Weight of AKAP 8L: 100 kDa.

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

## DATA



AKAP 8L (C-12): sc-132213. Western blot analysis of AKAP 8L expression in Jurkat whole cell lysate.



AKAP 8L (C-12): sc-132213. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



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Try **AKAP 8L (A-1): sc-376630** or **AKAP 8L (B-6): sc-376338**, our highly recommended monoclonal alternatives to AKAP 8L (C-12).