

# AKAP 149/121 (22): sc-136355

## 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. This family of proteins has been designated A-kinase anchoring proteins (AKAP). Members of this family, including MAP2 (microtubule-associated protein 2), neuronally expressed AKAP 79 and AKAP 150, and the DNA binding AKAP 95, display differential tissue specificity and localization. AKAP 149, the human homolog of mouse and rat AKAP 121, is a splice variant of S-AKAP 84 and may be involved in the phosphorylation-dependent regulation of RNA processing.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: AKAP1 (human) mapping to 17q22; Akap1 (mouse) mapping to 11 C.

## SOURCE

AKAP 149/121 (22) is a mouse monoclonal antibody raised against amino acids 73-84 of AKAP 121 of rat origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

AKAP 149/121 (22) is recommended for detection of AKAP 149 of human origin and AKAP 121 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for AKAP 149/121 siRNA (m): sc-40302, AKAP 149/121 shRNA Plasmid (m): sc-40302-SH and AKAP 149/121 shRNA (m) Lentiviral Particles: sc-40302-V.

Molecular Weight of human AKAP 149: 149 kDa.

Molecular Weight of mouse and rat AKAP 121: 121 kDa.

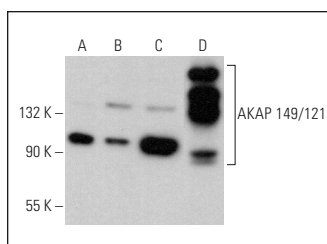
Molecular Weight of S-AKAP 84 isoform: 84 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ 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).

## DATA



AKAP 149/121 (22): sc-136355. Western blot analysis of AKAP 149/121 expression in HeLa (A), Jurkat (B), K-562 (C) and EOC 20 (D) whole cell lysates.

## 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.