

# Dmap1 (H-300): sc-135244

## BACKGROUND

Methylation of DNA contributes to the regulation of gene transcription in eukaryotic systems. DNA methylation is predominantly found on cytosine residues that are present in dinucleotide motifs consisting of a 5' cytosine followed by a guanine (CpG), and it requires the enzymatic activity of DNA methyltransferases (DNMTs), which results in transcriptional repression of the methylated gene. DNA methyltransferase 1-associating protein (Dmap1) binds to methyl-CpG rich domains and mediate the transcriptional inhibition associated with DNA methylation. Dmap1 interacts with Daxx to enhanced Daxx-mediated repression of glucocorticoid receptor transcriptional activity. Daxx also protects Dmap1 from protein degradation *in vivo*.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: DMAP1 (human) mapping to 1p34.1; Dmap1 (mouse) mapping to 4 D2.1.

## SOURCE

Dmap1 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Dmap1 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.

## APPLICATIONS

Dmap1 (H-300) is recommended for detection of Dmap1 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).

Dmap1 (H-300) is also recommended for detection of Dmap1 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for Dmap1 siRNA (h): sc-60543, Dmap1 siRNA (m): sc-60544, Dmap1 shRNA Plasmid (h): sc-60543-SH, Dmap1 shRNA Plasmid (m): sc-60544-SH, Dmap1 shRNA (h) Lentiviral Particles: sc-60543-V and Dmap1 shRNA (m) Lentiviral Particles: sc-60544-V.

Molecular Weight of Dmap1: 53 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, NIH/3T3 nuclear extract: sc-2138 or SW480 nuclear extract: sc-2155.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## 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.