

# SAMD12 (N-17): sc-87415

## BACKGROUND

The sterile  $\alpha$  motif (SAM) domain is a 70 residue structure found in a large number of proteins involved in diverse processes present throughout the eukaryotes. The SAM domain is known to bind RNA and is arranged in a small five-helix bundle with two large interfaces. SAMD12 (sterile  $\alpha$  motif domain-containing protein 12), is a 201 amino acid protein encoded by the SAMD12 gene which maps to human chromosome 8. Consisting of nearly 146 million base pairs, chromosome 8 encodes over 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that maps to chromosome 8.

## CHROMOSOMAL LOCATION

Genetic locus: SAMD12 (human) mapping to 8q24.12; Samd12 (mouse) mapping to 15 C.

## SOURCE

SAMD12 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of SAMD12 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87415 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

SAMD12 (N-17) is recommended for detection of SAMD12 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 SAMD7 or SAMD10.

SAMD12 (N-17) is also recommended for detection of SAMD12 in additional species, including canine and bovine.

Suitable for use as control antibody for SAMD12 siRNA (h): sc-77738, SAMD12 siRNA (m): sc-153204, SAMD12 shRNA Plasmid (h): sc-77738-SH, SAMD12 shRNA Plasmid (m): sc-153204-SH, SAMD12 shRNA (h) Lentiviral Particles: sc-77738-V and SAMD12 shRNA (m) Lentiviral Particles: sc-153204-V.

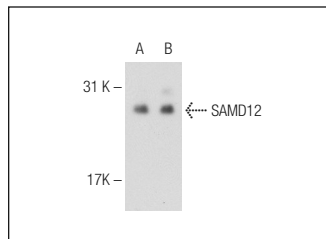
Molecular Weight of SAMD12: 23 kDa.

Positive Controls: A-431 nuclear extract: sc-2122 or PC-3 nuclear extract: sc-2152.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



SAMD12 (N-17): sc-87415. Western blot analysis of SAMD12 expression in A-431 (A) and PC-3 (B) nuclear extracts.

## 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 **SAMD12 (A-6): sc-377123**, our highly recommended monoclonal alternative to SAMD12 (N-17).