

# UBA2 (N-16): sc-47542

## BACKGROUND

The small ubiquitin-related modifier protein SUMO-1 belongs to the ubiquitin-like protein family, which are synthesized as precursor proteins that undergo processing before conjugation to target proteins. However, SUMO and ubiquitin differ with respect to targeting. Ubiquitination predominantly targets proteins for degradation, whereas sumoylation targets proteins to a variety of cellular processes, including nuclear transport, transcriptional regulation, apoptosis and protein stability. SUMO-1 utilizes homologs of the E1 and E2 enzymes for conjugation to proteins, which include I $\kappa$ B $\alpha$ , MDM2, p53, PML and RanGap1. AOS1 is homologous to the N-terminal half of E1 and UBA2 is homologous to the C-terminal half of E1. These proteins form a heterodimer that activates SUMO-1.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: UBA2 (human) mapping to 19q13.11; Uba2 (mouse) mapping to 7 B1.

## SOURCE

UBA2 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of UBA2 of human origin.

## STORAGE

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

## 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-47542 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

UBA2 (N-16) is recommended for detection of UBA2 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

UBA2 (N-16) is also recommended for detection of UBA2 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for UBA2 siRNA (h): sc-61740, UBA2 siRNA (m): sc-61741, UBA2 shRNA Plasmid (h): sc-61740-SH, UBA2 shRNA Plasmid (m): sc-61741-SH, UBA2 shRNA (h) Lentiviral Particles: sc-61740-V and UBA2 shRNA (m) Lentiviral Particles: sc-61741-V.

Molecular Weight of UBA2: 90 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## 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) 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.

## 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 **UBA2 (B-6): sc-376305** or **UBA2 (28): sc-136359**, our highly recommended monoclonal alternatives to UBA2 (N-16).