

Uev1A/Mms2 (K-16): sc-47557

BACKGROUND

Uev1A (also designated ubiquitin-conjugating enzyme E2 variant 1 (UEV1) and CROC1) and Mms2 (UEV2) proteins are similar in sequence and in predicted structure to the ubiquitin-conjugating enzymes or E2s, but lack a critical cysteine residue essential for the catalytic activity of E2 enzymes. Therefore, Uev1A does not have ubiquitin-conjugating activity *in vitro*. However, constitutive expression of exogenous Uev1A in colon carcinoma cells inhibits their capacity to differentiate upon confluence. Studies on recombinant Uev1A show that it localizes to the nucleus, excluding the nucleolar regions. Uev1A functions with TRAF6, a RING domain protein, to catalyze the synthesis of unique polyubiquitin chains linked through Lysine 63 of ubiquitin. UBC13 (ubiquitin-conjugating enzyme E2N (UBE2N)) may be involved in protein degradation mainly in the muscles and testis. In yeast, Mms2/UBC13 complex assembles novel polyubiquitin chains for signaling in DNA repair, and suggests that UEV proteins may act to increase diversity and selectivity in ubiquitin conjugation.

CHROMOSOMAL LOCATION

Genetic locus: UBE2V1 (human) mapping to 20q13.13, UBE2V2 (human) mapping to 8q11.21; Ube2v2 (mouse) mapping to 16 A2.

SOURCE

Uev1A/Mms2 (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Uev1A 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-47557 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

Uev1A/Mms2 (K-16) is recommended for detection of Uev1A isoforms 1, 2, 3 and 5 and Mms2 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).

Uev1A/Mms2 (K-16) is also recommended for detection of Uev1A isoforms 1, 2, 3 and 5 and Mms2 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of Uev1A: 26 kDa.

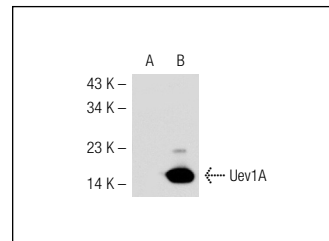
Molecular Weight of Mms2: 18 kDa.

Positive Controls: Uev1A (m): 293T Lysate: sc-127744, Mms2 (h): 293T Lysate: sc-117249 or Jurkat whole cell lysate: sc-2204.

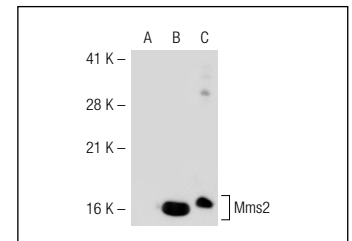
RECOMMENDED SECONDARY REAGENTS

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



Uev1A/Mms2 (K-16): sc-47557. Western blot analysis of Uev1A expression in non-transfected: sc-117752 (A) and mouse Uev1A transfected: sc-127744 (B) 293T whole cell lysates.



Uev1A/Mms2 (K-16): sc-47557. Western blot analysis of Mms2 expression in non-transfected 293T: sc-117752 (A), human Mms2 transfected 293T: sc-117249 (B) and Jurkat (C) 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Uev1A/Mms2 (E-6): sc-377254** or **Uev1A/Mms2 (C-12): sc-377223**, our highly recommended monoclonal alternatives to Uev1A/Mms2 (K-16).