

UFSP2 (S-12): sc-163500

BACKGROUND

UFM1 (ubiquitin-fold modifier 1) is a ubiquitin-like protein that is conjugated to target proteins by UBA5, an E1-like activating enzyme, and Ufc1, an E2-like conjugating enzyme. Through these interactions, UFM1 conjugates to target proteins by a covalent linkage. UFSP2 (Ufm1-specific protease 2) is a 469 amino acid thiol protease that specifically cleaves UFM1 precursor and leads to exposure of its conserved C-terminal glycine, a step required prior to conjugation to target proteins. UFSP2 is also capable of releasing UFM1 from UFM1-conjugated cellular proteins. The gene encoding UFSP2 maps to human chromosome 4, which houses nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes. Defects in some of the genes located on chromosome 4 are associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

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RESEARCH USE

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

CHROMOSOMAL LOCATION

Genetic locus: UFSP2 (human) mapping to 4q35.1; Ufsp2 (mouse) mapping to 8 B1.1.

SOURCE

UFSP2 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UFSP2 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-163500 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

UFSP2 (S-12) is recommended for detection of UFSP2 of mouse, rat 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); non cross-reactive with UFSP1.

UFSP2 (S-12) is also recommended for detection of UFSP2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for UFSP2 siRNA (h): sc-89115, UFSP2 siRNA (m): sc-154893, UFSP2 shRNA Plasmid (h): sc-89115-SH, UFSP2 shRNA Plasmid (m): sc-154893-SH, UFSP2 shRNA (h) Lentiviral Particles: sc-89115-V and UFSP2 shRNA (m) Lentiviral Particles: sc-154893-V.

Molecular Weight of UFSP2: 53 kDa.

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.

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.