

Ubp-M (E-20): sc-9766

BACKGROUND

Ubiquitin-processing protease-M (Ubp-M) belongs to a family of enzymes that regulate the degradation of ubiquitinated proteins by deubiquitination. Ubiquitin-mediated proteolysis requires the transfer of ubiquitin chains to lysine groups on selected cellular proteins, which then potentiates the proteolytic degradation of these conjugated substrates by the 26S proteasome. Ubps, which are also designated deubiquitinating enzymes (DUBs), regulate growth activity and differentiation. Ubp-M is localized to the cytosol, and, during the G₂/M phase transition through the completion of mitosis, Ubp-M is phosphorylated. This phosphorylation state coincides with an accumulation of free ubiquitin chains within the cell and an increased hydrolysis of ubiquitin conjugated proteins. Targets of Ubp-M include the histone proteins H2A and H2B, which are monoubiquitinated during interphase and anaphase and are deubiquitinated during mitosis. This deubiquitination of the histone proteins correlates to the condensation of the mitotic chromatin, indicating that Ubp-M influences histone function and, thereby, facilitates the organization of mitotic chromatin and directs the progression of cell growth.

CHROMOSOMAL LOCATION

Genetic locus: USP16 (human) mapping to 21q21.3.

SOURCE

Ubp-M (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Ubp-M 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-9766 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ubp-M (E-20) is recommended for detection of Ubp-M of 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Ubp-M (N-20) is also recommended for detection of Ubp-M in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Ubp-M siRNA (h): sc-41687, Ubp-M shRNA Plasmid (h): sc-41687-SH and Ubp-M shRNA (h) Lentiviral Particles: sc-41687-V.

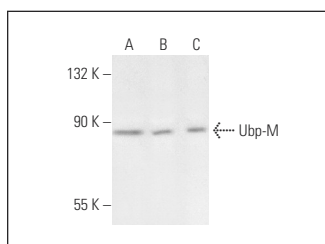
Molecular Weight of Ubp-M isoforms: 94/92/58/47 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201, K-562 whole cell lysate: sc-2203 or HeLa whole cell lysate: sc-2200.

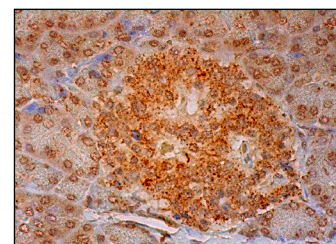
RECOMMENDED SECONDARY REAGENTS

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) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Ubp-M (E-20): sc-9766. Western blot analysis of Ubp-M expression in K-562 (A), HeLa (B) and A-431 (C) whole cell lysates.



Ubp-M (E-20): sc-9766. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing nuclear and cytoplasmic staining of exocrine glandular cells and Islets of Langerhans.

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 or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **Ubp-M (B-3): sc-390683**, our highly recommended monoclonal alternative to Ubp-M (E-20).