SANTA CRUZ BIOTECHNOLOGY, INC.

USP2 (C-20): sc-79300

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The ubiquitin (Ub) pathway involves three sequential enzymatic steps that facilitate the conjugation of Ub and Ub-like molecules to specific protein substrates. Through the use of a wide range of enzymes that can add or remove Ub, the Ub pathway controls many intracellular processes such as signal transduction, transcriptional activation and cell cycle progression. USP2 (Ub specific peptidase 2), also known as 41 kDa Ub-specific protease, is a 605 amino acid deubiquitinating enzyme that participates in the Ub pathway. Localized to the cytoplasm, USP2 forms a homooligomer and catalyzes the reaction of the Ub C-terminal thioester with water to form Ub and a thiol. USP2 is expressed as two isoforms produced by alternative splicing.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: USP2 (human) mapping to 11q23.3; Usp2 (mouse) mapping to 9 A5.1.

SOURCE

USP2 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of USP2 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 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79300 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

USP2 (C-20) is recommended for detection of USP2 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).

USP2 (C-20) is also recommended for detection of USP2 in additional species, including equine and canine.

Suitable for use as control antibody for USP2 siRNA (h): sc-76821, USP2 siRNA (m): sc-76822, USP2 shRNA Plasmid (h): sc-76821-SH, USP2 shRNA Plasmid (m): sc-76822-SH, USP2 shRNA (h) Lentiviral Particles: sc-76821-V and USP2 shRNA (m) Lentiviral Particles: sc-76822-V.

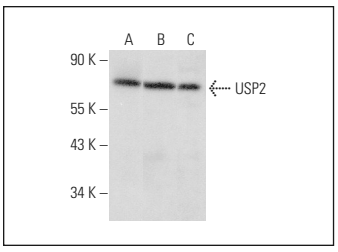
Molecular Weight of USP2: 68 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, K-562 whole cell lysate: sc-2203 or MCF7 whole cell lysate: sc-2206.

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



USP2 (C-20): sc-79300. Western blot analysis of USP2 expression in HL-60 (**A**), K-562 (**B**) and MCF7 (**C**) whole cell lysates.

RESEARCH USE

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