SANTA CRUZ BIOTECHNOLOGY, INC.

USP21 (3D10): sc-293400

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 ubiquitin, the Ub pathway controls many intracellular processes such as signal transduction, transcriptional activation and cell cycle progression. USP21 (ubiquitin specific peptidase 21), also known as USP16 or USP23, is a 565 amino acid protein that belongs to the C19 peptidase family of ubiquitin carboxy-terminal hydrolases. Capable of removing ubiquitin from ubiquitinated proteins, USP21 plays a role in signal transduction and can also remove NEDD8 from NEDD8-conjugated proteins, possibly functioning to influence NEDD8-mediated protein proteolysis. Multiple isoforms of USP21 exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: USP21 (human) mapping to 1q23.3; Usp21 (mouse) mapping to 1 H3.

SOURCE

USP21 (3D10) is a mouse monoclonal antibody raised against amino acids 466-565 of USP21 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

USP21 (3D10) is recommended for detection of USP21 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

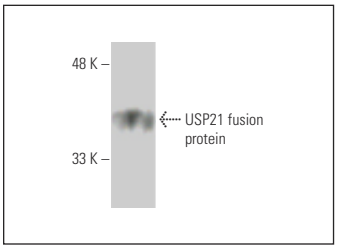
Suitable for use as control antibody for USP21 siRNA (h): sc-76825, USP21 siRNA (m): sc-76826, USP21 shRNA Plasmid (h): sc-76825-SH, USP21 shRNA Plasmid (m): sc-76826-SH, USP21 shRNA (h) Lentiviral Particles: sc-76825-V and USP21 shRNA (m) Lentiviral Particles: sc-76826-V.

Molecular Weight of USP21: 62 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



USP21 (3D10): sc-293400. Western blot analysis of human recombinant USP21 fusion protein.

SELECT PRODUCT CITATIONS

1. Yun, S.I., Hong, H.K., Yeo, S.Y., Kim, S.H., Cho, Y.B. and Kim, K.K. 2020. Ubiquitin-specific protease 21 promotes colorectal cancer metastasis by acting as a Fra-1 deubiquitinase. Cancers 12: 207.

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 for detailed protocols and support products.