SANTA CRUZ BIOTECHNOLOGY, INC.

USP33 (h): 293 Lysate: sc-111190

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. USP33 (ubiquitin specific peptidase 33), also known as VDU1 (VHL-interacting deubiquitinating enzyme 1), is a widely expressed 942 amino acid protein that belongs to the peptidase C19 family of proteins. Containing two DUSP domains and a UBP-type zinc finger, USP33 functions as deubiquitinating enzyme that cleaves ubiquitin residues from both ubiquitinylated proteins and ubiquitin-fused precursors, thereby saving these proteins from proteasomal degradation. In addition, USP33 binds VHL and can be ubiquitinated for degradation in a VHL-dependent manner. Three isoforms of USP33 are expressed due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: USP33 (human) mapping to 1p31.1.

PRODUCT

USP33 (h): 293 Lysate represents a lysate of human USP33 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

USP33 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive USP33 antibodies. Recommended use: 10-20 µl per lane.

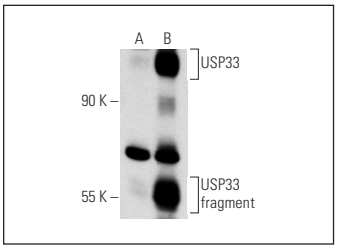
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-tranfected 293 cells.

USP33 (1D7): sc-100632 is recommended as a positive control antibody for Western Blot analysis of enhanced human USP33 expression in USP33 transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

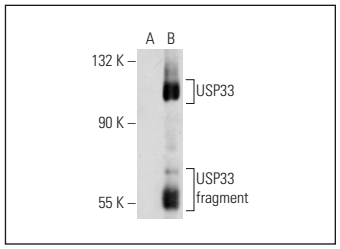
RECOMMENDED SUPPORT REAGENTS

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.

DATA



USP33 (1D7): sc-100632. Western blot analysis of USP33 expression in non-transfected: sc-110760 (**A**) and human USP33 transfected: sc-111190 (**B**) 293 whole cell lysates.



USP33 (1D7): sc-100632. Western blot analysis of USP33 expression in non-transfected: sc-110760 (**A**) and human USP33 transfected: sc-111190 (**B**) 293 whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.