



USP1 (h2): 293T Lysate: sc-158057

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. USP1 (ubiquitin specific peptidase 1), also known as UBP, ubiquitin carboxyl-terminal hydrolase 1, ubiquitin thioesterase 1 or deubiquitinating enzyme 1, is a 785 amino acid that belongs to the peptidase C19 family of ubiquitin carboxy-terminal hydrolases. A negative regulator of DNA damage repair, USP1 specifically deubiquitinates FANCD2 in the DNA repair pathway. Following DNA damage, autocatalytic cleavage of USP1 leads to an increase in ubiquitinated PCNA and the recruitment of POL H. Multiple isoforms of USP1 exist due to alternative splicing events.

REFERENCES

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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.

CHROMOSOMAL LOCATION

Genetic locus: USP1 (human) mapping to 1p31.3.

PRODUCT

USP1 (h2): 293T Lysate represents a lysate of human USP1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

USP1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive USP1 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

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.