



USP50 (K-14): sc-104738

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. USP50 (ubiquitin specific peptidase 50) is a 339 amino acid protein that belongs to the peptidase C19 family of proteins. Weakly expressed in a few tissues, USP50 contains all of the active residues necessary to function as a deubiquitinating enzyme, but it appears to be catalytically inactive. The gene encoding USP50 maps to human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: USP50 (human) mapping to 15q21.2; Usp50 (mouse) mapping to 2 F1.

RESEARCH USE

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

SOURCE

USP50 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of USP50 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-104738 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

USP50 (K-14) is recommended for detection of USP50 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

USP50 (K-14) is also recommended for detection of USP50 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for USP50 siRNA (h): sc-90192, USP50 siRNA (m): sc-106682, USP50 shRNA Plasmid (h): sc-90192-SH, USP50 shRNA Plasmid (m): sc-106682-SH, USP50 shRNA (h) Lentiviral Particles: sc-90192-V and USP50 shRNA (m) Lentiviral Particles: sc-106682-V.

Molecular Weight of USP50: 39 kDa.

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) 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.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.