

UCH-L1 (G-17): sc-23852

BACKGROUND

UCH-L1 (ubiquitin C-terminal hydrolase) is a member of a gene family whose products hydrolyze small C-terminal adducts of ubiquitin to generate the ubiquitin monomer. Expression of UCH-L1 is highly specific to neurons and to cells of the diffuse neuroendocrine system and their tumors. UCH-L1 is expressed in brain neurons. Examination of specific brain regions reveals expression in all areas tested, particularly in the substantia nigra. UCH-L1 represents 1 to 2% of total soluble brain protein. Its occurrence in Lewy bodies and its function in the proteasome pathway make it a compelling candidate gene in Parkinson disease. The gene which encodes UCH-L1 maps to human chromosome 4p14. The 230 amino acid human UCH-L3 protein is 54% identical to that of UCH-L1. UCH-L3 is the predominant thiol protease and has high-affinity binding sites for ubiquitin.

CHROMOSOMAL LOCATION

Genetic locus: UCHL1 (human) mapping to 4p13; Uchl1 (mouse) mapping to 5 C3.1.

SOURCE

UCH-L1 (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UCH-L1 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-23852 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

UCH-L1 (G-17) is recommended for detection of UCH-L1 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).

UCH-L1 (G-17) is also recommended for detection of UCH-L1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for UCH-L1 siRNA (h): sc-42304, UCH-L1 siRNA (m): sc-42305, UCH-L1 shRNA Plasmid (h): sc-42304-SH, UCH-L1 shRNA Plasmid (m): sc-42305-SH, UCH-L1 shRNA (h) Lentiviral Particles: sc-42304-V and UCH-L1 shRNA (m) Lentiviral Particles: sc-42305-V.

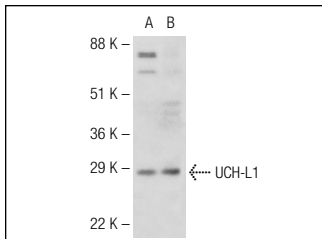
Molecular Weight of UCH-L1: 25 kDa.

Positive Controls: mouse brain extract: sc-2253, rat brain extract: sc-2392 or IMR-32 cell lysate: sc-2409.

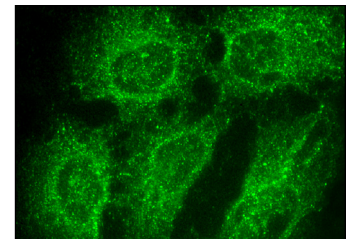
RECOMMENDED SECONDARY REAGENTS

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



UCH-L1 (G-17): sc-23852. Western blot analysis of UCH-L1 expression in mouse brain (A) and rat brain (B) tissue extracts.



UCH-L1 (G-17): sc-23852. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Sun, J., et al. 2008. Role of UCH-L1/ubiquitin in acute testicular ischemia-reperfusion injury. *Biochem. Biophys. Res. Commun.* 366: 539-544.
- Yamauchi, T., et al. 2008. Ubiquitin-mediated stress response in the spinal cord after transient ischemia. *Stroke* 39: 1883-1889.

RESEARCH USE

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

PROTOCOLS

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



Try **UCH-L1 (C-4): sc-271639** or **UCH-L1 (13C4): sc-58594**, our highly recommended monoclonal alternatives to UCH-L1 (G-17).