10320 Camino Santa Fe, Suite G
San Diego, CA 92121
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Anti-Ubiquitin C-terminal Hydrolase 1 (UCHL1) Antibody

Our Anti-Ubiquitin C-terminal Hydrolase 1 (UCHL1) primary antibody from PhosphoSolutions is chicken

Catalog # AN1602

Specification

Anti-Ubiquitin C-terminal Hydrolase 1 (UCHL1) Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P09936
Reactivity	**Bovine, Chicken, Drosophila, C.Elegans**
Host	**Chicken**
Clonality	**Polyclonal**
Isotype	**IgY**
Calculated MW	**24824**

Anti-Ubiquitin C-terminal Hydrolase 1 (UCHL1) Antibody - Additional Information

Gene ID **7345**

Other Names

Epididymis luminal protein 117 antibody, Epididymis secretory protein Li 53 antibody, HEL 117 antibody, HEL S 53 antibody, NDGOA antibody, Neuron cytoplasmic protein 9.5 antibody, OTTHUMP00000218137 antibody, OTTHUMP00000218139 antibody, OTTHUMP00000218140 antibody, OTTHUMP00000218141 antibody, Park 5 antibody, PARK5 antibody, PGP 9.5 antibody, PGP9.5 antibody, PGP95 antibody, Protein gene product 9.5 antibody, Ubiquitin C terminal esterase L1 antibody, Ubiquitin C terminal hydrolase antibody, Ubiquitin C terminal hydrolase L1 antibody, Ubiquitin carboxyl terminal esterase L1 antibody, Ubiquitin carboxyl terminal hydrolase isozyme L1 antibody, Ubiquitin carboxyl-terminal hydrolase isozyme L1 antibody, Ubiquitin thioesterase L1 antibody, Ubiquitin thiolesterase antibody, Ubiquitin thiolesterase L1 antibody, UCH-L1 antibody, UCHL1 antibody, UCHL1_HUMAN antibody

Target/Specificity

Ubiquitin C-terminal hydrolase 1 (UCHL1) is also known as ubiquitin carboxyl esterase L1, ubiquitin thiolesterase, neuron-specific protein PGP9.5 and Park5. It was originally identified as a major component of the neuronal cytoplasm from 2-dimensional gel analysis of brain tissues, and was given the name PGP9.5 (1). It was later found that ubiquitin C-terminal hydrolase enzyme activity was associated with the PGP9.5 protein (2). The ubiquitin C-terminal hydrolases cleave ubiquitin from other molecules. Regulation of the ubiquitin pathway is very important and many disease states are associated with defects in this pathway. Genetic knockout of UCHL1 in mice results in a motor neuron degeneration similar to the spontaneous gracile axonal dystrophy (gad) mutant mice (3). Point mutations in the UCHL1 gene are associated with some forms of human Parkinson's disease (4). Since UCHL1 is heavily expressed in neurons, it is released in large amounts following injury or degeneration, so the detection of UCHL1 in CSF and other bodily fluids can be used as a biomarker.

Format

Total IgY fraction

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Anti-Ubiquitin C-terminal Hydrolase 1 (UCHL1) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

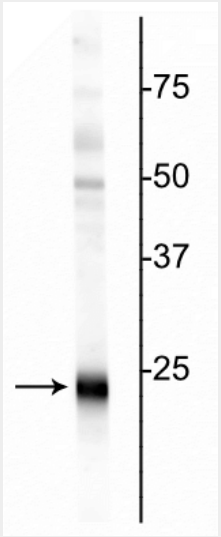
Shipping
Blue Ice

Anti-Ubiquitin C-terminal Hydrolase 1 (UCHL1) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Ubiquitin C-terminal Hydrolase 1 (UCHL1) Antibody - Images



Western blot of rat hippocampal homogenate showing specific immunolabeling of the ~24 kDa UCHL1 protein.

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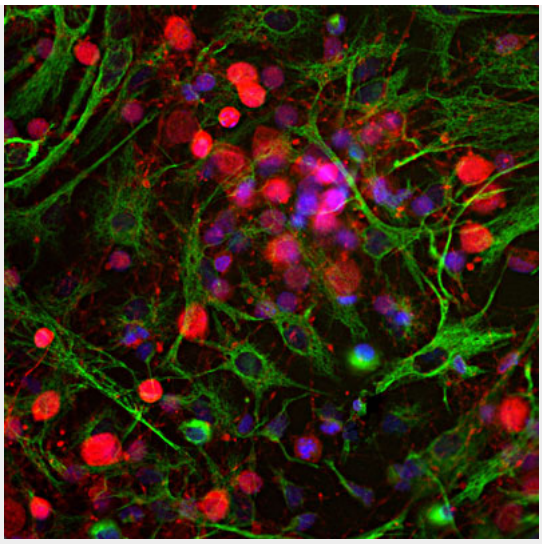
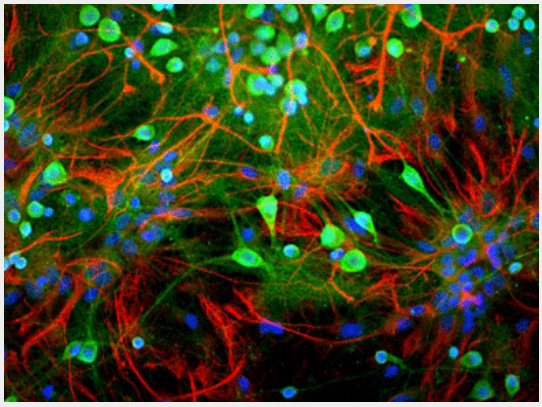


Immunostaining of E20 rat cortical neuron and glial culture stained with anti-UCHL1 antibody (cat. 2061-UCHL1, red, 1:500) and rabbit anti-vimentin antibody (green). The blue is DAPI staining nuclear DNA. The anti-UCHL1 stains strongly the cell body and dendrites of neurons, while anti-vimentin specifically stains intermediate filaments in fibroblasts and glia cells.



Immunostaining of mixed neuron/glial cultures stained with anti-UCHL1 antibody (cat. 2061-UCHL1, green, 1:500) and rabbit anti-GFAP antibody (cat. 620-GFAP , red, 1:1000). The blue stains nuclear DNA. The anti-UCHL1 stains strongly the cell body and dendrites of neurons, while anti-GFAP specifically labels astrocytes.

Anti-Ubiquitin C-terminal Hydrolase 1 (UCHL1) Antibody - Background

Ubiquitin C-terminal hydrolase 1 (UCHL1) is also known as ubiquitin carboxyl esterase L1, ubiquitin thiolesterase, neuron-specific protein PGP9.5 and Park5. It was originally identified as a major component of the neuronal cytoplasm from 2-dimensional gel analysis of brain tissues, and was given the name PGP9.5 (1). It was later found that ubiquitin C-terminal hydrolase enzyme activity was associated with the PGP9.5 protein (2). The ubiquitin C-terminal hydrolases cleave ubiquitin from other molecules. Regulation of the ubiquitin pathway is very important and many disease states are associated with defects in this pathway. Genetic knockout of UCHL1 in mice results in a motor neuron degeneration similar to the spontaneous gracile axonal dystrophy (gad) mutant mice (3). Point mutations in the UCHL1 gene are associated with some forms of human Parkinson's disease (4). Since UCHL1 is heavily expressed in neurons, it is released in large amounts following injury or degeneration, so the detection of UCHL1 in CSF and other bodily fluids can be used as a biomarker.