

Datasheet for 200-901-E52**Ubiquitin Hydrolase (UCHL1) Antibody****Overview**

Description:	Anti-Ubiquitin Hydrolase (UCHL1) (Chicken) Antibody - 200-901-E52
Item No.:	200-901-E52
Size:	100 µL
Applications:	IF, Multiplex, WB, Other
Reactivity:	Human, Mouse, Rat, Bovine
Host Species:	Chicken

Product Details

Background: UCHL1 antibody recognizes Ubiquitin C-terminal hydrolase 1 (UCHL1) which 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. It was later found that ubiquitin C-terminal hydrolase enzyme activity was associated with the PGP9.5 protein. 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. Point mutations in the UCHL1 gene are associated with some forms of human Parkinson's disease. 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. Therefore, UCHL1 antibody is ideal for investigators involved in neuronal disorders and, more generally in Neuroscience.

Synonyms:	UCH-L1, Neuron cytoplasmic protein 9.5, PGP 9.5, Ubiquitin thioesterase L1
Host Species:	Chicken
Clonality:	Polyclonal
Format:	IgY

Target Details

Gene Name:	UCHL1
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Reactivity:	Human, Mouse, Rat, Bovine
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-UCHL1 Antibody was produced in chicken by repeated immunizations with recombinant full length human UCHL1 extensively purified from E. coli.
Purity/Specificity:	Anti-UCHL1 antibody is directed against human UCHL1 proteins. The antibody was purified from chicken eggs as an IgY fraction. Reactivity is expected from human, mouse, rat and bovine. Cross reactivity with UCHL1 from other species has not been determined. However, expect reactivity against most mammalian species based on high sequence homology.
Relevant Links:	• UniProtKB - P09936 • GeneID - 7345 • UniProtKB - P09936.2

Application Details

Tested Applications:	IF, Multiplex, WB
Suggested Applications:	Other (Based on references)
Application Note:	Anti-Ubiquitin Hydrolase antibody is tested for use in Western Blotting and IF. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 24 kDa in size corresponding to the UCHL1 proteins in Western blots in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:25,000
IF:	1:500
WB:	1:2500

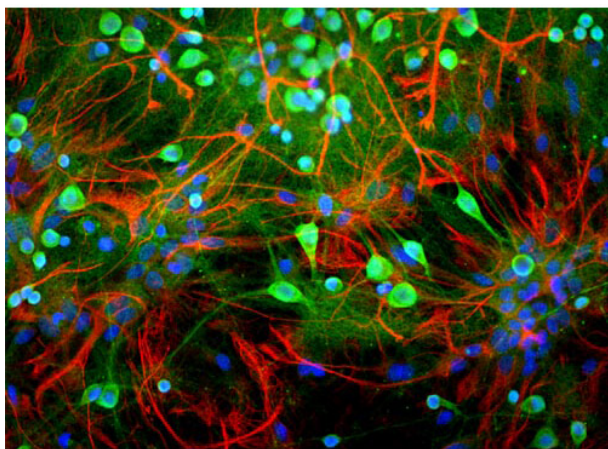
Formulation

Physical State:	Liquid
Concentration:	titrated reagent Sufficient to run approximately 10 miniblots
Buffer:	0.01 M Sodium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images

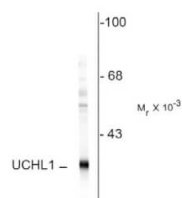


Immunofluorescence Microscopy

Immunofluorescence Microscopy of Chicken anti-Ubiquitin Hydrolase antibody. Tissue: Rat mixed neuron/glia cultures. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Ubiquitin Hydrolase antibody at 1:500 for 1 h at RT. Secondary antibody: Fluorescein chicken secondary antibody at 1:10,000 for 45 min at RT. Localization: Ubiquitin Hydrolase is neuronal. Staining: Ubiquitin Hydrolase Antibody as green fluorescent signal, GFAP Antibody as red, DNA stain as blue.

Western Blot

Western Blot of Chicken anti-Ubiquitin Hydrolase antibody. Lane 1: rat hippocampal homogenate. Lane 2: none. Load: 10 µg per lane. Primary antibody: Ubiquitin Hydrolase antibody at 1:2,500 for overnight at 4°C. Secondary antibody: IRDye800™ chicken secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 24 kDa for Ubiquitin Hydrolase. Other band(s): Ubiquitin Hydrolase splice variants and isoforms.



References

- Guseva D et al. Over-expression of Oct4 and Sox2 transcription factors enhances differentiation of human umbilical cord blood cells in vivo. *Biochem Biophys Res Commun.* (2014)

Disclaimer

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