

Datasheet for 900-301-E52**Ubiquitin Hydrolase (UCHL1) Antibody****Overview**

Description:	Anti-Ubiquitin Hydrolase (UCHL1) (Mouse) Monoclonal Antibody - 900-301-E52
Item No.:	900-301-E52
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Human, Mouse, Rat, Bovine
Host Species:	Mouse

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 monoclonal antibody is ideal for investigators involved in Neuroscience.
Synonyms:	mouse anti-UCHL1 Antibody, mouse anti-Ubiquitin Hydrolase Antibody, UCH-L1, Neuron cytoplasmic protein 9.5, PGP 9.5, Ubiquitin thioesterase L1
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	BH7
Format:	IgG1

Target Details

Gene Name:	UCHL1
Reactivity:	Human, Mouse, Rat, Bovine
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-UCHL1 Monoclonal Antibody was produced in mouse by repeated immunizations with recombinant full length human UCHL1 extensively purified from E. coli.
Purity/Specificity:	Anti-UCHL1 antibody is directed against human UCHL1 . The antibody is protein G purified from concentrated clarified cell culture supernate. Reactivity is expected against human, bovine, mouse, and rat sources. Cross reactivity from other sources has not been determined. However, expect reactivity with UCHL1 from most mammalian sources based on sequence homology.
Relevant Links:	• UniProtKB - P09936 • GenelD - 7345 • UniProtKB - P09936.2

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Ubiquitin Hydrolase antibody is tested for use in ELISA and Western Blot, IHC, ICC, 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 blot 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:	1:10,000
IF:	1:500
WB:	1:5000

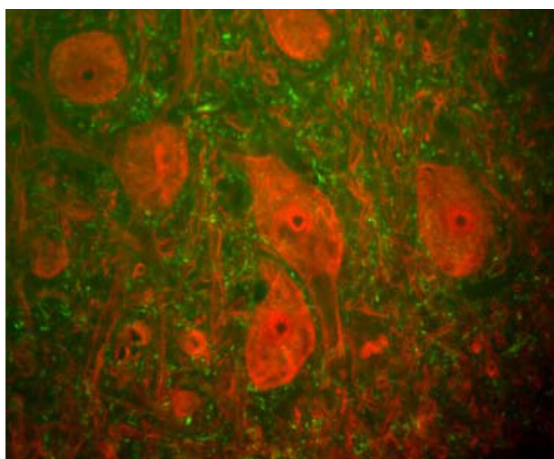
Formulation

Physical State:	Liquid
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	50% (v/v) Glycerol

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

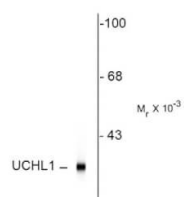


Immunofluorescence Microscopy

Immunofluorescence Microscopy of Mouse anti-Ubiquitin Hydrolase antibody. Tissue: Rat Spinal Chord. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Ubiquitin Hydrolase antibody at 1:500 for 1 h at RT. Secondary antibody: Fluorescein mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: Ubiquitin Hydrolase fills the cytoplasm of their perikarva and dendrites. Staining: Ubiquitin Hydrolase as red fluorescent signal and NF-H with green fluorescent signal.

Western Blot

Western Blot of Mouse anti-Ubiquitin Hydrolase antibody. Lane 1: rat hippocampal homogenate. Lane 2: none. Load: 10 µg per lane. Primary antibody: Ubiquitin Hydrolase antibody at 1:5,000 for overnight at 4°C. Secondary antibody: IRDye800™ mouse 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): none.



Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.