

Basic Information

Product Name	Anti-PGP9.5/UCHL1 Antibody	
Gene Name	UCHL1	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human PGP9.5 (120-153aa ETEKMSPEDRAKCFEKNEAIQAAHDAVAQEGQCR), different from the related mouse and rat sequences by two amino acids.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	25KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow cytometry (FCM): 1-3 µg/1x10 ⁶ cells (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

UCH-L1, also known as PGP9.5, 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. It is abundantly present in all neurons (accounts for 1-2% of total brain protein), expressed specifically in neurons and testis/ovary. The catalytic triad of UCH-L1 contains a cysteine at position 90, an aspartate at position 176, and a histidine at position 161 that are responsible for its hydrolase activity.

Selected Validation Data

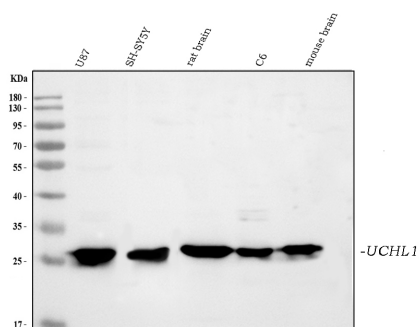


Figure 1. Western blot analysis of anti- UCHL1 antibody (PB0854). The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: U87 whole cell lysates,
Lane 2: SH-SY5Y whole cell lysates,
Lane 3: rat brain tissue lysates,
Lane 4: C6 whole cell lysates,
Lane 5: mouse brain tissue lysates.
Use rabbit anti- UCHL1 1:1000, probed with a goat anti-rabbit IgG- HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for UCHL1 at approximately 25KD. The expected band size for UCHL1 is at 25KD.

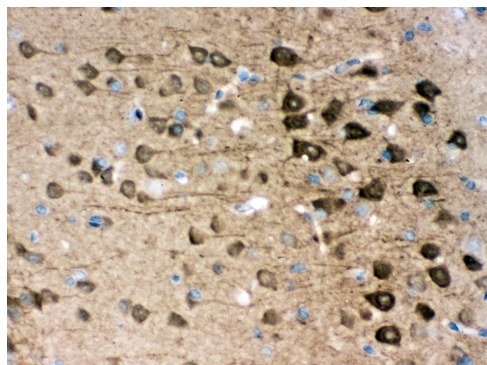


Figure 2. IHC analysis using Anti-UCHL1 antibody (PB0854) detected in paraffin-embedded section of mouse brain tissue. Biotinylated goat Anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

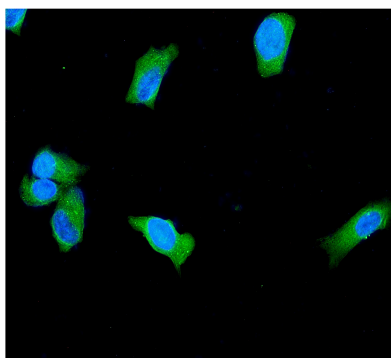


Figure 5. ICC analysis using anti- UCHL1 antibody (PB0854). was detected in immersion fixed SH-SY5Y cell line. Cells were stained using the Dylight488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog # BA1127) and counterstained with DAPI (blue).

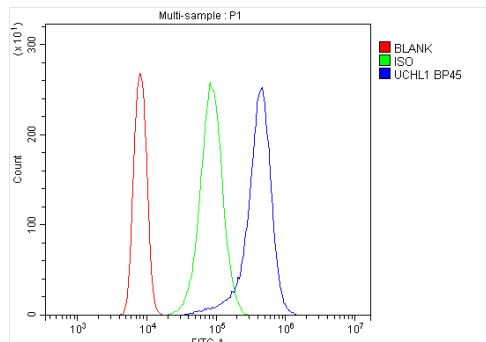


Figure 6. Flow cytometry analysis of K562 cell (1x10⁶) DyLight 488 conjugated goat anti- rabbit IgG(blue) was used as secondary antibody.Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).