

**PGP9.5 Rabbit Polyclonal Antibody(UCHL-1)**

<b>Catalog No :</b>	YN5493
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC
<b>Target :</b>	PGP9.5
<b>Fields :</b>	>>Parkinson disease;>>Pathways of neurodegeneration - multiple diseases
<b>Gene Name :</b>	UCHL1
<b>Protein Name :</b>	PGP9.5
<b>Human Gene Id :</b>	7345
<b>Human Swiss Prot No :</b>	P09936
<b>Immunogen :</b>	Recombinant Protein derived from human PGP9.5
<b>Specificity :</b>	This antibody detects endogenous levels of human PGP9.5
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	IHC 1:50-200, WB 1:500-2000
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)
<b>Observed Band :</b>	25kD

**Background :** The protein encoded by this gene belongs to the peptidase C12 family. This enzyme is a thiol protease that hydrolyzes a peptide bond at the C-terminal glycine of ubiquitin. This gene is specifically expressed in the neurons and in cells of the diffuse neuroendocrine system. Mutations in this gene may be associated with Parkinson disease.[provided by RefSeq, Sep 2009],

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**Function :** catalytic activity:Thiol-dependent hydrolysis of ester, thioester, amide, peptide and isopeptide bonds formed by the C-terminal Gly of ubiquitin (a 76-residue protein attached to proteins as an intracellular targeting signal).,disease:Oxidation of Met-1, Met-6, Met-12, Met-124 and Met-179 to methionine sulfoxide, and oxidation of Cys-220 to cysteine sulfonic acid have been observed in brains from Alzheimer disease (AD) and Parkinson disease (PD) patients. In AD, UCHL1 was found to be associated with neurofibrillary tangles.,function:Ubiquitin-protein hydrolase involved both in the processing of ubiquitin precursors and of ubiquitinated proteins. This enzyme is a thiol protease that recognizes and hydrolyzes a peptide bond at the C-terminal glycine of ubiquitin. Also binds to free monoubiquitin and may prevent its degradation in lysosomes. The homodimer may have ATP-independent ubiquitin

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**Subcellular Location :** Cytoplasm . Endoplasmic reticulum membrane ; Lipid-anchor . About 30% of total UCHL1 is associated with membranes in brain.

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**Expression :** Found in neuronal cell bodies and processes throughout the neocortex (at protein level). Expressed in neurons and cells of the diffuse neuroendocrine system and their tumors. Weakly expressed in ovary. Down-regulated in brains from Parkinson disease and Alzheimer disease patients.

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## Products Images