



## Product Datasheet

<b>Product Name</b>	PGP9.5 Human Recombinant
<b>Cata No</b>	CB501187
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	Ubiquitin carboxyl-terminal hydrolase isozyme L1, UCH-L1, EC 3.4.19.12, Ubiquitin thioesterase L1, Neuron cytoplasmic protein 9.5, PGP 9.5, UCHL1, PGP9.5, PARK5.

### Description

UCHL1 (PGP9.5) belongs to a gene family whose products hydrolyze small C-terminal adducts of ubiquitin to produce the ubiquitin monomer. Protein Gene Product (PGP9.5) is a neuron specific protein, structurally and immunologically distinct from neuron specific enolase. Human UCHL1 and UCHL3 have an extremely complicated knot structure for a protein, with five knot crossings. It is considered that the knot structure may increase a protein's resistance to degradation in the proteasome.

The protein, which has a molecular weight of 27 kDa was first defined by high resolution two dimensional PAGE. Standard immunohistochemical techniques have demonstrated the presence of PGP9.5 in neurons and nerve fibers at all levels of the central and peripheral nervous system, in many neuroendocrine cells, in segments of the renal tubules, in spermatogonia and Leydig cells of the testis, in ova and in some cells of both the pregnant and non pregnant corpus luteum. A point mutation (I93M) in UCHL1 is implicated as the cause of Parkinson's disease in one kindred. On the other hand, a polymorphism (S18Y) in UCHL1 has been found to be associated with a reduced risk for Parkinson's

disease. Furthermore, UCHL1 is associated with the Alzheimer's disease, and required for normal synaptic and cognitive function.

PGP9.5 Human Recombinant full length protein expressed in E.coli, shows a 36 kDa band on SDS-PAGE.

The PGP9.5 is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered clear solution.

### Formulation

PGP9.5 at 0.1mg/ml in 50mM Tris-Acetate, pH7.5, 1mM EDTA, 20% Glycerol.

### Stability

Store vial at -20°C to -80°C. When stored at the recommended temperature, this protein is stable for 12 months.

**Please prevent freeze-thaw cycles.**

### Applications

- ELISA
- Inhibition Assays
- Western Blotting