

Summary

ARG22883 anti-UCHL1 / PGP9.5 antibody [31A3]

Package: 100 μg Store at: -20°C

Summary	
Product Description	Mouse Monoclonal antibody [31A3] recognizes UCHL1 / PGP9.5 Mouse anti Human Protein Gene Product 9.5 antibody, clone 31A3 recognizes protein gene product 9.5 (PGP9.5), a ubiquitin hydrolase which is widely expressed in neuronal tissues and represents 1-2% of total soluble brain proteins. PGP9.5, also known as ubiquitin C-terminal hydrolase 1 (UCHL-1), is involved in the regulation of the ubuiquitin pathway.Mouse anti Human Protein Gene Product 9.5 antibody, clone 31A3 stains neuronal cell bodies and axons in the CNS and periphery, small nerve fibres in peripheral tissues, neuroendocrine cells in the pituitary, thyroid, pancreas and tumours of the DNES.Clones 31A3 and 13C4 each recognise a different epitope towards the N-terminus of the protein. Mouse anti Human Protein Gene Product 9.5 antibody, clone 31A3 also recognizes PGP9.5 in other species, including rat and rabbit but evidence suggests it does not bind to PGP9.5 in guinea pigs (Wilson et al. 1988). Mouse anti Human Protein Gene Product 9.5 antibody, clone 31A3 has been used successfully as a capture reagent with clone 13C4 as a detection reagent in a sandwich ELISA to evaluate contamination of processed meat samples with neuronal tissue (Gaunitz et al. 2009).
Tested Reactivity	Hu, Rat, Rb
Species Does Not React With	Gpig
Tested Application	ELISA, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	31A3
Isotype	lgG1
Target Name	UCHL1 / PGP9.5
Species	Human
Immunogen	Native, from brain
Conjugation	Un-conjugated
Alternate Names	PGP95; UCH-L1; PGP9.5; PARK5; Ubiquitin thioesterase L1; HEL-117; Neuron cytoplasmic protein 9.5; Uch-L1; EC 6; PGP 9.5; Ubiquitin carboxyl-terminal hydrolase isozyme L1; NDGOA; EC 3.4.19.12

Application Instructions

Application table	Application	Dilution
	ELISA	1:500 - 1:2000
	IHC-P	1:100 - 1:400
	WB	Assay-dependent
Application Note	IHC-P: This antibody is suitable for use on paraffin embedded tissue sections. We do however recommend fixation in 95% ethanol / 5% acetic acid for 2-3 hours prior to paraffin embedding. Specimens which have not been fixed in acetic acid/alcohol will require pretreatment using the microwave-citrate buffer method. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	UCHL1
Gene Full Name	ubiquitin carboxyl-terminal esterase L1 (ubiquitin thiolesterase)
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]
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 ligase activity. [UniProt]
Calculated Mw	25 kDa
РТМ	O-glycosylated.

Images

	A549
kDa	
250	
150	
100 75	
50	
37	
25 20 15 10	-

ARG22883 anti-UCHL1 / PGP9.5 antibody [31A3] WB image

Western blot: A549 human alveolar adenocarcinoma whole cell lysate stained with ARG22883 anti-UCHL1 / PGP9.5 antibody [31A3].