Product datasheet

anti-p62/ SQSTM1 (C-terminus) guinea pig polyclonal, serum

Short overview

Cat. No.	GP62-C
Quantity	100 µl

Product description

Host	Guinea pig
Antibody Type	Polyclonal
Immunogen	C-terminal domain (20 amino acids: C-NYD IGA ALD TIQ YSK HPP PL) of human p62 protein, coupled to KLH. This peptide sequence is identical in human, monkey, bovine, mouse, and rat.
Formulation	Contains 0.09% sodium azide
Note	Centrifuge prior to opening
Conjugate	Unconjugated
Purification	Stabilized antiserum
Storage	Short term at 2-8°C; long term storage in aliquots at -20°C; avoid freeze/thaw cycles
Intended use	Research use only
Application	IHC, WB
Reactivity	Bovine, Human, Mouse, Rat

Applications

Immunohistochemistry (IHC) - frozen	1:100-1:600
Immunohistochemistry (IHC) - paraffin	1:100-1:600 (microwave treatment recommended)
Western Blot (WB)	1:1,000-1:3,000

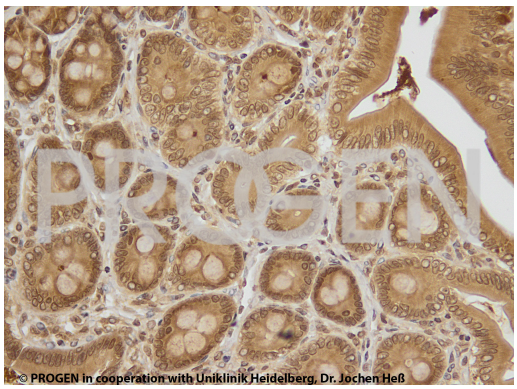
Background

Human 62 kDa (p62) protein, is present in intracytoplasmic inclusions (e.g. hyaline bodies) of hepatocellular carcinoma. p62 protein (also described as ubiqutin-binding protein; sequestosome 1; SQSTM1) has been found in many tissues and cells, including lymphoid cells, serving probably a common cellular signal transduction mechanism (e.g. ubiquitin-associated degradation and autophagy). The antiserum stains also neurofibrillary tangles in the brain of patients suffering from Alzheimer's disease.

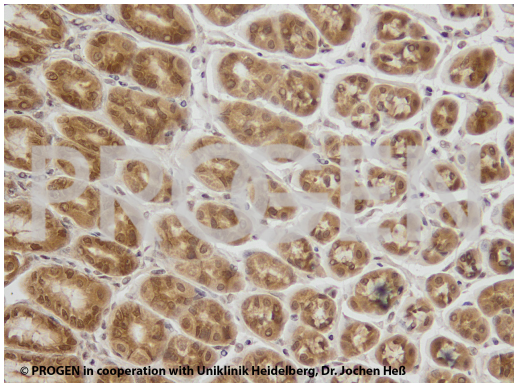
The GP62-C antibody is knockout validated (Waguri & Komatsu, 2009).

Waguri, S. & Komatsu, M. Chapter 9 Biochemical and Morphological Detection of Inclusion Bodies in Autophagy-Deficient Mice. Methods in Enzymology 453, 181-196 (2009).

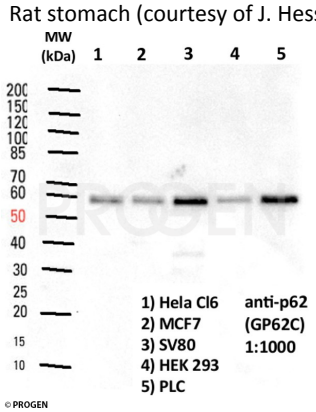
Product images



Rat colon (courtesy of J. Hess, University Hospital Heidelberg)



Rat stomach (courtesy of J. Hess, University Hospital Heidelberg)



WB with anti-p62 antibody (Cat. No. GP62-C, 1:1000) on different human cell lines

References

Publication	Species	Application
Li, Y. et al. Impairment of autophagy after spinal cord injury potentiates neuroinflammation and motor function deficit in mice., Theranostics 12, 5364-5388, (2022).	mouse	IHC
Xiaojing Kang Shin Shimada Hiroki Miyahara Keiichi Higuchi Masayuki Mori. BALB.NCT-Cpox nct is a unique mouse model of hereditary coproporphyria., Mol Genet Metab Rep, 35100964, (2023).	mouse	IHC/IF
Iannibelli E. et al., VCP-related myopathy: a case series and a review of literature., Acta Myol, 42, 2-13, (2023).	Human	IHC-IF
Akwa Y. et al., Stimulation of synaptic activity promotes TFEB-mediated clearance of pathological MAPT/Tau in cellular and mouse models of tauopathies., Autophagy, 19, 660-677, (2023).	Mouse	IHC
Opland C. K. et al. Activity-dependent tau cleavage by caspase-3 promotes neuronal dysfunction and synaptotoxicity., iScience, 26, 106905, (2023).	human, mouse	WB