Product datasheet

anti-p62/ SQSTM1 (C-terminus) + positive western blot control

Short overview

Cat. No.	GP62-C-WBC
Quantity	100 µl anti-p62 + 50 µg western blot control

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	antibody: contains 0.09% sodium azide; western blot control: lyophilized, reconstitute in 50 µl 1 x SDS buffer (lysis buffer composition: PBS + Pefablock)
Note	Centrifuge prior to opening
Conjugate	Unconjugated
Purification	Cell culture lysate, Stabilized antiserum
Storage	Antibody: short term at 2-8°C; long term in aliquots at -20°C; western blot control: lyophilized at 2-8°C, reconstituted at -20°C; avoid freeze/thaw cycles for both components
Intended use	Research use only
Application	IHC, WB
Reactivity	Bovine, Human, Mouse, Rat

Applications

Immunohistochemistry (IHC) - frozen	anti-p62: 1:100-1:600
Immunohistochemistry (IHC) - paraffin	anti-p62: 1:100-1:600 (microwave treatment recommended)
Western Blot (WB)	anti-p62: 1:1,000-1:3,000; western blot control: 10 µg total protein per lane

Background

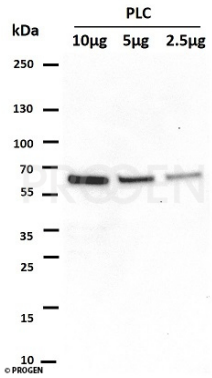
anti-p62 antibody:The anti-p62 antibody is useful for research in ubiquitin-associated degradation and autophagy and for detection of neurofibrillary tangles in the brain of Alzheimer disease patients, in Parkinson diseases and various chronic liver diseases.Human 62 kDa (p62) protein, is present in 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).

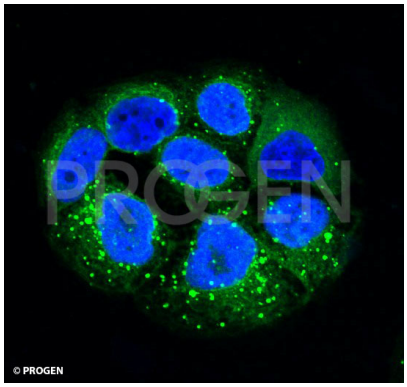
Waguri, S. & Komatsu, M. Chapter 9 Biochemical and Morphological Detection of Inclusion Bodies in Autophagy-Deficient Mice. Methods in Enzymology 453, 181196 (2009).

Positive western blot control: Whole Cell Lysate from PLC/PRF/5 human Hepatoma cell line.PLC whole cell lysate was prepared by homogenization in PBS containing Pefablock. Protein concentration was determined using Bradford assay.

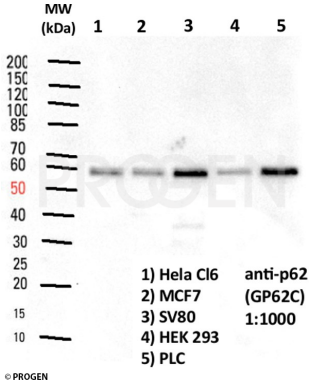
Product images



WB with anti-p62 antibody (Cat. No. GP62-C, 1:1000), PLC whole cell lysate (2.5 - 10 ug)



Human PLC cells



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

References

Publication	Species	Application
Kawakami, I. et al. Progression of phosphorylated Î±-synuclein in Macaca fuscata. Brain Pathol. 31, e12952(2021).	macaque	IHC (paraffin)
Nozaki, M. et al. SQSTM1L341V variant that is linked to sporadic ALS exhibits impaired association with MAP1LC3 in cultured cells. eNeurologicalSci. 22, 100301(2021).	mouse	ICC/IF
SchlÃ¼termann, D. et al. FIP200 controls the TBK1 activation threshold at SQSTM1/p62-positive condensates. Sci. Rep. 11, (2021).	mouse	WB
Deitersen, J. et al. High-throughput screening for natural compound-based autophagy modulators reveals novel chemotherapeutic mode of action for arzanol. Cell Death Dis. 12, (2021).	human	WB
Cui, Y. H. et al. Autophagy of the m6A mRNA demethylase FTO is impaired by low-level arsenic exposure to promote tumorigenesis. Nat. Commun. 12, 1â€“19 (2021).	human	WB