Product Datasheet

p62/SQSTM1 Antibody - BSA Free
NBP1-42822

Unit Size: 0.1 ml

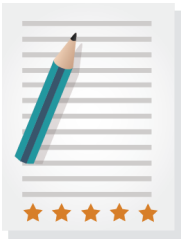
Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

www.novusbio.com technical@novusbio.com

Publications: 8

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP1-42822

Updated 4/13/2025 v.20.1



NBP1-42822

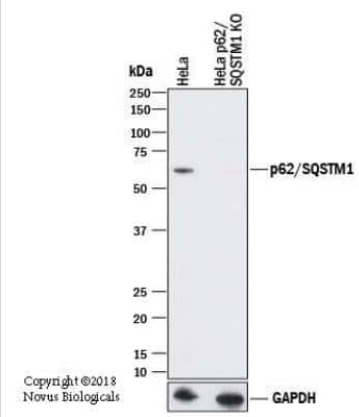
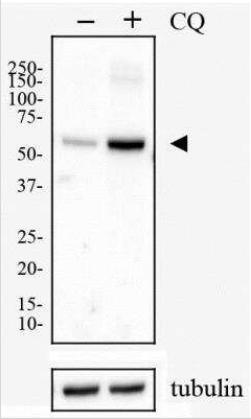
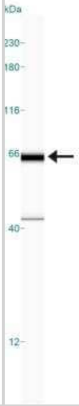
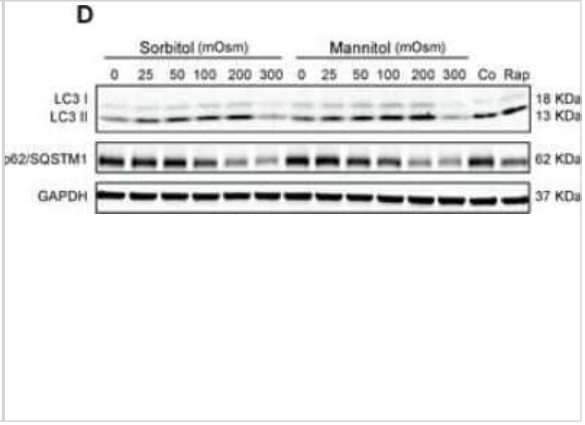
p62/SQSTM1 Antibody - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.1% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS and 30% Glycerol

Product Description	
Host	Rabbit
Gene ID	8878
Gene Symbol	SQSTM1
Species	Human, Mouse, Rat
Immunogen	A synthetic peptide made to an internal region of the human p62/SQSTM1 protein (within residues 400-450). [Swiss-Prot Q13501]

Product Application Details	
Applications	Western Blot, Simple Western, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Knockout Validated
Recommended Dilutions	Western Blot 1:2000, Simple Western 1:25, Flow Cytometry reported in scientific literature (PMID 35451674), Immunocytochemistry/ Immunofluorescence 1:50, Knockout Validated
Application Notes	In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. See Simple Western Antibody Database for Simple Western validation: Tested in HeLa lysate 0.5 mg/mL and HeLa lysate 0.1 mg/mL; separated by Size; antibody dilution of 1:200, 1:25; apparent MW was 110 kDa.

Images

Western Blot: p62/SQSTM1 Antibody [NBP1-42822] - Western blot shows lysates of HeLa human cervical epithelial carcinoma parental cell line and p62/SQSTM1 knockout (KO) HeLa cell line. PVDF membrane was probed with Rabbit Anti-Human p62/SQSTM1 polyclonal Antibody (Catalog # NBP1-42822) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog #HAF008). Specific band was detected for p62/SQSTM1 at approximately 60 kDa (as indicated) in the parental HeLa cell line, but is not detectable in the knockout HeLa cell line. This experiment was conducted under reducing conditions.	
Western Blot: p62/SQSTM1 Antibody [NBP1-42822] - HeLa cells were treated with (+) or without 50 uM (-) of Chloriquine (CQ) for 24 hours. Total cell lysates were prepared and separated on a 12% gel by SDS-PAGE. Protein was transferred to PVDF membrane and blocked in 5% non-fat milk. The membrane was then probed with 2 ug/ml anti-p62/SQSMT1 in 1% milk and detected with an anti-rabbit HRP secondary antibody using chemiluminescence. Note the upregulation of p62 (arrowhead) in response to chloroquine treatment and the blockage of autophagy.	
Simple Western: p62/SQSTM1 Antibody [NBP1-42822] - Simple Western lane view shows a specific band for p62/SQSTM1 in 0.5 mg/ml of HeLa lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.	
Western Blot: p62/SQSTM1 Antibody [NBP1-42822] - Hyperosmotic stress stimulatesA utophagyHeLa and HCT 116 cells were transduced with an adenovirus coding for GFP-LC3 (Ad GFP-LC3) for 24 h. LC3 I-to-LC3 II conversion and p62/SQSTM1 depletion were assessed by Western blot analysis in HeLa and HCT116 cells treated with various concentrations of sorbitol or mannitol (25-300 mOsm) .It indicated times (0.5-6 h). Image collected and cropped by Citeab from the following publication (licensed under a CC-BY license.	

Publications

Lei, Z;Krishnamachary, B;Ritzel, RM;Khan, NZ;Li, Y;Li, H;Brunner, K;Faden, AI;Wu, J; Age-related changes in plasma extracellular vesicles influence neuroinflammation in the brain and neurological outcome after traumatic spinal cord injury Research square 2023-04-17 [PMID: 37131758] (Flow Cytometry, Mouse)

Li Y, Lei Z, Ritzel RM Et al. Impairment of autophagy after spinal cord injury potentiates neuroinflammation and motor function deficit in mice Theranostics 2022-08-01 [PMID: 35910787] (FLOW, Mouse)

Details:
Citation using the Alexa Fluor 647 version of this antibody.

Ritzel RM, Li Y, Lei Z et al. Functional and transcriptional profiling of microglial activation during the chronic phase of TBI identifies an age-related driver of poor outcome in old mice GeroScience 2022-04-22 [PMID: 35451674] (FLOW, Mouse)

Ritzel R, Li Y, Lei Z Et al. Age-related Dysregulation of Autophagy Contributes to Microglial Dysfunction and Chronic Neurobehavioral Deficits After Traumatic Brain Injury Research Square 2021-11-11 (Flow Cytometry Control, Mouse)

Giretova M, Medvecky L, Petrovova E et al. Polycystin-2 Is Required for Starvation- and Rapamycin-Induced Atrophy in Myotubes Front Endocrinol (Lausanne) 2019-05-08 [PMID: 31133985] (WB, Mouse)

Lin YJ, Liang WM, Chen CJ et al. Network analysis and mechanisms of action of Chinese herb-related natural compounds in lung cancer cells Phytomedicine 2019-03-13 [PMID: 30901663] (WB, Human)

Pena-Oyarzun D, Troncoso R, Kretschmar C et al. Hyperosmotic stress stimulates autophagy via polycystin-2 Oncotarget 2017-08-22 [PMID: 28915568] (WB, Human)

Zhang S, Gui Xh, Huang Lp et al. Neuroprotective Effects of B-Asarone Against 6-Hydroxy Dopamine-Induced Parkinsonism via JnK/Bcl-2/Beclin-1 Pathway. Mol. neurobiol. 2014-11-18 [PMID: 25404088] (WB, Rat)

Procedures

Protocol specific for SQSTM1 Antibody (NBP1-42822)
p62/SQSTM1 Antibody:
Procedure Guide for NBP1-42822 - SQSTM1 Antibody
Western Blot Protocol
1. Perform SDS-PAGE (4-12% MOPS) on samples to be analyzed, loading 40 ug of total protein per lane.
2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.
3. Rinse membrane with dH2O and then stain the blot using Ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations

and locations of molecular weight markers using a pencil.
4. Rinse the blot in TBS for approximately 5 minutes.
5. Block the membrane using 5% BSA in TBS + Tween, 1 hour at RT.
6. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
7. Dilute the rabbit anti-SQSTM1 primary antibody (NBP1-42822) in blocking buffer and incubate 1 hour at room temperature.
8. Rinse the membrane in dH2O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
9. Apply the diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions (Pierce ECL).
Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%, provided
it does not interfere with antibody-antigen binding.

Novus Biologicals USA
10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada
21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd
19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information
www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Products Related to NBP1-42822

NBP1-42822PEP	p62/SQSTM1 Antibody Blocking Peptide
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NBP1-42822

Earn gift cards/discounts by submitting a publication using this product: www.novusbio.com/publications