

Product Datasheet

HSP60 Antibody (LK2) NBP2-32867-0.1mg

Unit Size: 0.1 mg

Store at 4C.

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NBP2-32867-0.1mg

HSP60 Antibody (LK2)

Product Information	
Unit Size	0.1 mg
Concentration	0.2 mg/ml
Storage	Store at 4C.
Clonality	Monoclonal
Clone	LK2
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Purity	Protein A or G purified
Buffer	10 mM PBS with 0.05% BSA
Target Molecular Weight	60 kDa
Product Description	
Description	200ug/ml of antibody purified from Bioreactor Concentrate by Protein A or G. Prepared in 10 mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA at 1.0 mg/ml. (NBP2-34671) Antibody with azide - store at 2 to 8C.
Host	Mouse
Gene ID	3329
Gene Symbol	HSPD1
Species	Human, Mouse, Rat, Bacteria, S. pyogenes, Chicken, E. coli, Guinea Pig, Hamster, Invertebrate, Parasite, Plant, Monkey, Yeast
Reactivity Notes	Borellia, Streptococcus pyogenes, Yersinia enterocolitica, Salmonella typhimurium, Treponema hyodysenteriae, Treponema innocense, Trichinella spiralis, Helminths, and Spinach.
Marker	Mitochondrial Marker
Specificity/Sensitivity	Recognizes a 60kDa protein, identified as the heat shock protein 60 (HSP60). Its epitope is localized between aa 383-419 of human HSP60. A wide variety of environmental and pathophysiological stressful conditions trigger the synthesis of a family of proteins known as heat shock proteins (hsp s), more appropriately called as stress response proteins (srp s). HSP60 is a potential antigen in a number of autoimmune diseases. In human arthritis and in experimentally induced arthritis in animals, disease development coincides with the development of immune reactivity directed against not only bacterial HSP60, but also against its mammalian homolog.
Immunogen	Recombinant human HSP60 protein (Uniprot: P10809)
Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin, Western Blot (Negative)
Recommended Dilutions	Western Blot 1-2 ug/ml, Simple Western 1:10, Immunocytochemistry/ Immunofluorescence 1-2 ug/ml, Immunohistochemistry-Paraffin 1-2 ug/ml, Western Blot (Negative)

Application Notes

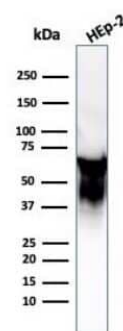
Immunohistochemistry (Formalin-fixed): 1-2ug/ml for 30 minutes at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95C followed by cooling at RT for 20 minutes. Optimal dilution for a specific application should be determined. In 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 and HepG2 lysates, separated by Size, antibody dilution of 1:10, apparent MW was 61 kDa.

Images

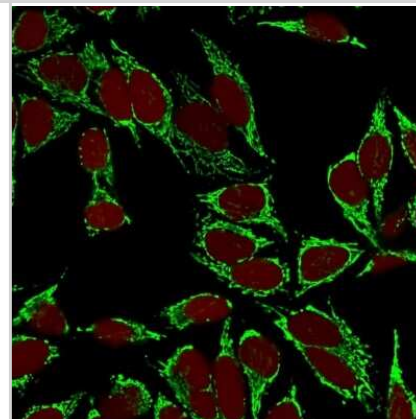
Simple Western: HSP60 Antibody (LK2) [NBP2-32867] - Simple Western lane view shows a specific band for HSP60 in 0.2 mg/ml of HeLa (left) and HepG2 (right) lysate(s). This experiment was performed under reducing conditions using the 12-230 kDa separation system.



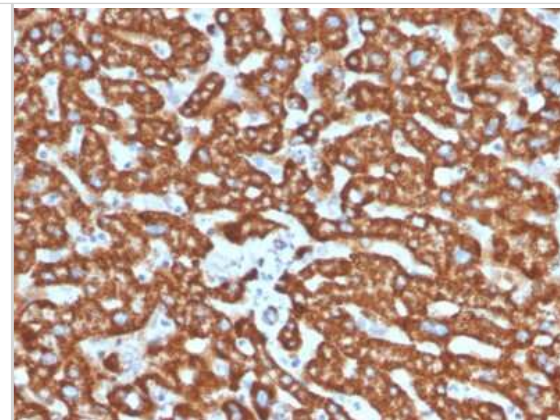
Western Blot: HSP60 Antibody (LK2) [NBP2-32867] - Western blot analysis of Hep2 cell lysate using HSP60 Mouse Monoclonal Antibody (LK2).



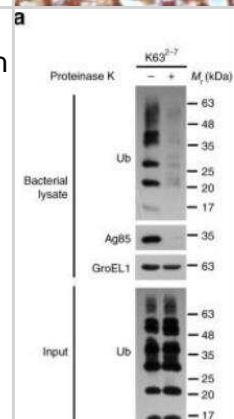
Immunocytochemistry/Immunofluorescence: HSP60 Antibody (LK2) [NBP2-32867] - Immunofluorescent staining of MEOH-fixed HeLa cells using followed by goat anti-Mouse labeled with CF488 (Green); Nuclei are labeled with NucSpot red).



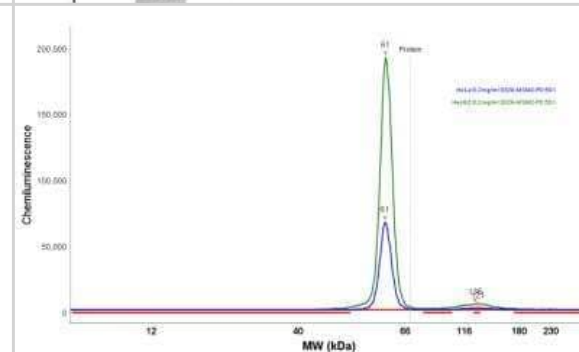
Immunohistochemistry-Paraffin: HSP60 Antibody (LK2) [NBP2-32867] - Formalin-fixed, paraffin-embedded human liver in colon stained with HSP60 Mouse Monoclonal Antibody (LK2).



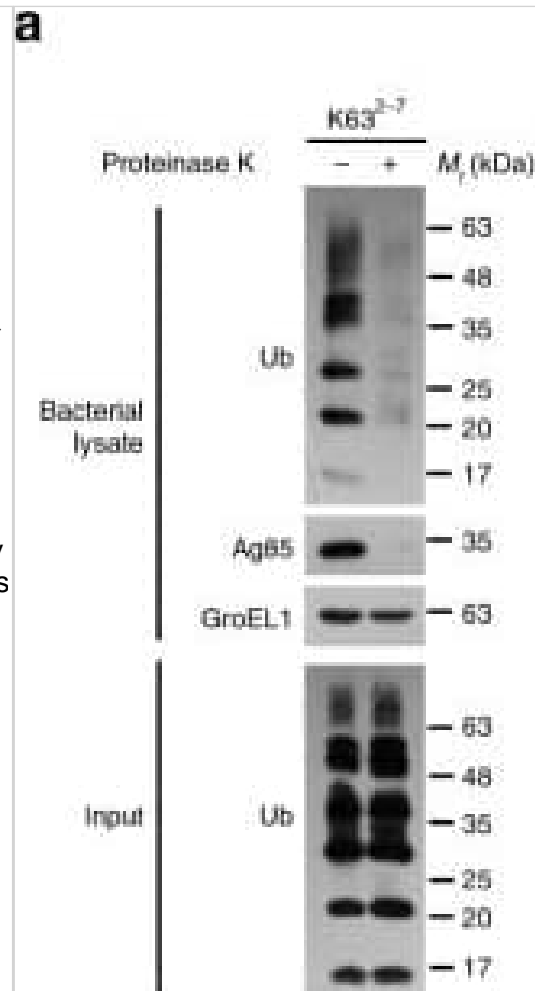
Western Blot (Negative): HSP60 Antibody (LK2) [NBP2-32867] - Immunoblot analysis of whole bacterial lysate of Mtb cells pretreated with (+) or without (-) proteinase K followed by incubation with K632-7 poly-Ub chains at 4C for 4 hr. Image collected and cropped by CiteAb from the following publication (www.nature.com/articles/s41467-019-09955-8) licensed under a CC-BY license.



Simple Western: HSP60 Antibody (LK2) [NBP2-32867] - Electropherogram image of the corresponding Simple Western lane. HSP60 antibody was used at 10 ug/ml dilution of HeLa and HepG2 lysates(s) respectively.



Western Blot: HSP60 Antibody (LK2) [NBP2-32867] - Mtb Rv1468c directly binds to poly-Ub chains in a UBA-dependent manner. a, b Immunoblot analysis of whole bacterial lysate of Mtb cells pretreated w/ (+) or w/out (-) proteinase K followed by incubation w/ K632-7 (a) or K482-7 (b) poly-Ub chains at 4 °C for 4 h. c Confocal microscopy analysis for colocalization of pSC301-Mtb stably expressing green fluorescent protein (GFP) w/ K632-7 or K482-7 Ub chains in vitro. Bacteria (green) treated w/ (+) or w/out (-) proteinase K further incubated w/ poly-Ub chains as in a & b, & then immunostained using anti-Ub antibody (red). Scale bars, 10 μ m. The % colocalizations of Ub & Mtb shown at the bottom. A total of 100 bacterial cells counted. Two-tailed unpaired t-test performed. d Schematic representation of Mtb Rv1468c constructs used. e In vitro interaction analysis of Ub & GST-tagged full-length Mtb Rv1468c or the truncated mutants as indicated in d. Purified recombinant GST-tagged Mtb Rv1468c variants immobilized on glutathione sepharose resin. Mono-Ub (His6-tagged), K63 or K48-linked poly-Ub (Ub2-7) added, & then the protein complexes assayed by immunoblotting w/ indicated antibodies. f Immunoblot analysis of proteins immunoprecipitated (IP) w/ anti-Flag M2 Affinity Gel from lysates of HEK293T cells transfected w/ empty vector (-) or hemagglutinin (HA)-tagged Ub (+) & Flag-tagged wild-type (WT) Rv1468c or its mutants (V64G or L65G). g Confocal microscopy analysis of HeLa cells cotransfected w/ vectors encoding HA-tagged Ub (red) & GFP-tagged WT Rv1468c, V64G or L65G mutant (green). Nuclei (blue) stained w/ DNA-binding dye DAPI. Scale bars, 10 μ m. Results representatives from at least 3 independent experiments (mean \pm s.e.m. of n = 5 in c). The source data used in c provided in Source Data Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31036822>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Yong Zhang, Jie Li, Bingxi Li, Jing Wang, Cui Hua Liu Mycobacterium tuberculosis Mce3C promotes mycobacteria entry into macrophages through activation of β 2 integrin-mediated signalling pathway. Cellular microbiology 2018-11-13 [PMID: 29125705]

Chai Q, Wang X, et al. A Mycobacterium tuberculosis surface protein recruits ubiquitin to trigger host xenophagy. Nat Commun 2019-04-29 [PMID: 31036822] (WB, Human, Mouse)

Perez-Gonzalez A, Kniewel R, Veldhuizen M et al. Adaptation of the GoldenBraid modular cloning system and creation of a toolkit for the expression of heterologous proteins in yeast mitochondria. BMC Biotechnol. 2017-11-13 [PMID: 29132331] (WB, Yeast)

Details:

This citation used the Azide and BSA Free form of this antibody

Buren S, Young EM, Sweeny EA et al. Formation of Nitrogenase NifDK Tetramers in the Mitochondria of Saccharomyces cerevisiae ACS Synth Biol 2017-06-16 [PMID: 28221768] (WB)

Details:

This reference used the HRP version of NBP2-32867.



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Products Related to NBP2-32867-0.1mg

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)
NBP1-77396PEP	HSP60 Antibody Blocking Peptide

Limitations

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