

Product Datasheet

HSPA8/HSC71/Hsc70 Antibody (13D3) NB120-2788

Unit Size: 100 ul

Store at -20C. Avoid freeze-thaw cycles.

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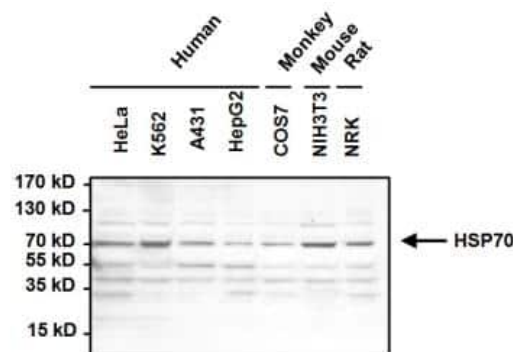
NB120-2788**HSPA8/HSC71/Hsc70 Antibody (13D3)**

| Product Information | |
|------------------------------------|--|
| Unit Size | 100 ul |
| Concentration | This product is unpurified. The exact concentration of antibody is not quantifiable. |
| Storage | Store at -20C. Avoid freeze-thaw cycles. |
| Clonality | Monoclonal |
| Clone | 13D3 |
| Preservative | 0.05% Sodium Azide |
| Isotype | IgM |
| Purity | Unpurified |
| Buffer | Ascites diluted with PBS |
| Target Molecular Weight | 70 kDa |
| Product Description | |
| Host | Mouse |
| Gene ID | 3312 |
| Gene Symbol | HSPA8 |
| Species | Human, Mouse, Rat, Bovine, Feline, Fish, Hamster, Primate |
| Reactivity Notes | Reported cross-reactivity with Bovine in literature (Terlecky et al.). Hamster reactivity reported in scientific literature (PMID: 16737757). Fish reactivity reported in scientific literature (PMID: 9006893). Rat reactivity reported by customer review. Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Additional Mouse on Mouse blocking steps may be required for IHC and ICC experiments. Please contact Technical Support for more information. |
| Specificity/Sensitivity | This displays slight cross-reactivity to HSP 70. |
| Immunogen | Mouse spermatogenic cell protein. |
| Product Application Details | |
| Applications | Western Blot, Simple Western, Flow Cytometry, Immunoblotting, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation, Block/Neutralize |
| Recommended Dilutions | Western Blot 1:1000 - 1:5000, Simple Western reported by internal validation, Flow Cytometry 1:10 - 1:1000, Immunohistochemistry 1:20 - 1:200, Immunocytochemistry/ Immunofluorescence 1:20 - 1:200, Immunoprecipitation 2 ul, Immunohistochemistry-Paraffin 1:20 - 1:200, Immunohistochemistry-Frozen 1:20 - 1:200, Immunoblotting, Block/Neutralize |
| Application Notes | WB: Detects an approx. 70 kDa protein representing Hsc 70. By 2D gel electrophoresis, this antibody binds strongly to Hsc 70 and faintly to HSP 70 both before and after heat shock. IHC: Staining of Hsc 70 in mouse spermatids/spermatozoa results in staining restricted to the post acrosomal region in condensing spermatids and to the midpiece in spermatozoa. May be useful in IHC-Fr. Use in Immunoblotting reported in scientific literature (PMID 28095639). In Simple Western internal validation: Mouse Brain lysate as sample; separated by size; antibody dilution of 1:2000; matrix was 12-230 kDa; detected by Chemiluminescence. |

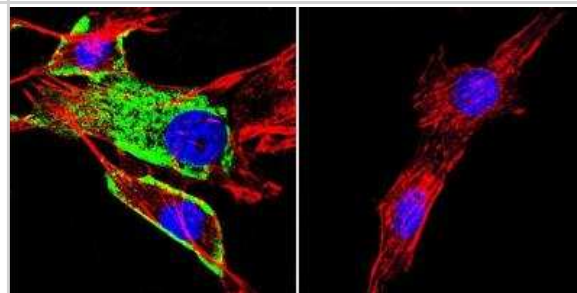


Images

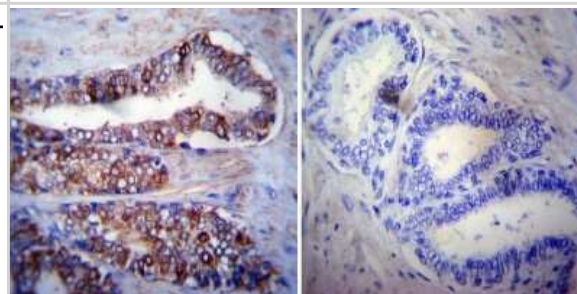
Western Blot: Hsp70 / Hsc70 Antibody (13D3) [NB120-2788] - Proteins were transferred to a PVDF membrane and blocked with 5% BSA/TBST for at least 1 hour. The membrane was probed with a HSP70 monoclonal antibody at a dilution of 1:1000 overnight at 4C on a rocking platform, washed in TBS-0.1%Tween 20, and probed with a goat anti-mouse IgM-HRP secondary antibody at a dilution of 1:20,000 for at least 1 hour.



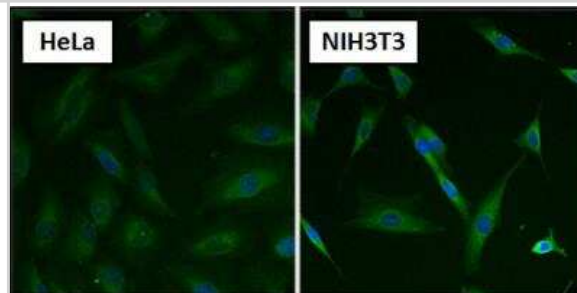
Immunocytochemistry/Immunofluorescence: Hsp70 / Hsc70 Antibody (13D3) [NB120-2788] - Analysis of HSC70 using Monoclonal antibody (13D3) shows staining in NIH-3T3 cells. HSC70 staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing HSC70 at a dilution of 1:20-1:200 over night at 4C, washed with PBS and incubated with a DyLight-488 conjugated.



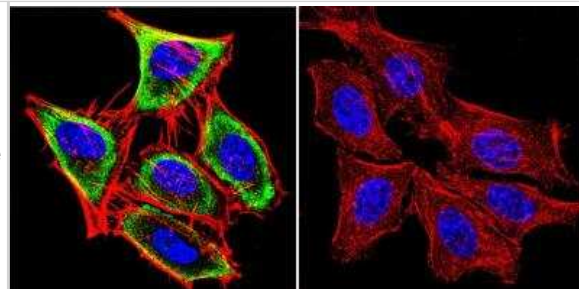
Immunohistochemistry-Paraffin: Hsp70 / Hsc70 Antibody (13D3) [NB120-2788] - Both normal and cancer biopsies of deparaffinized human Prostate carcinoma tissue.



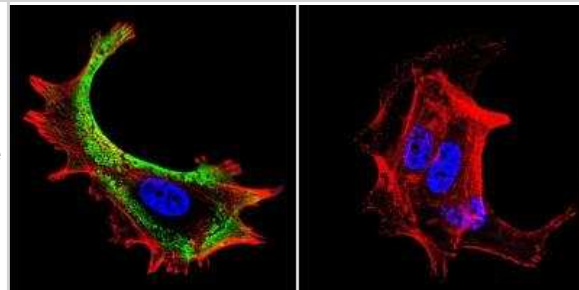
Immunocytochemistry/Immunofluorescence: Hsp70 / Hsc70 Antibody (13D3) [NB120-2788] - Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 minutes at room temperature. Cells were probed with a HSP70 monoclonal antibody at a dilution of 1:50 for at least 1 hour at room temperature, washed with PBS, and incubated with DyLight 488 goat anti-mouse IgG secondary antibody at a dilution of 1:400 for 30 minutes at room temperature. Nuclei (blue) were stained with Hoechst 33342 dye.



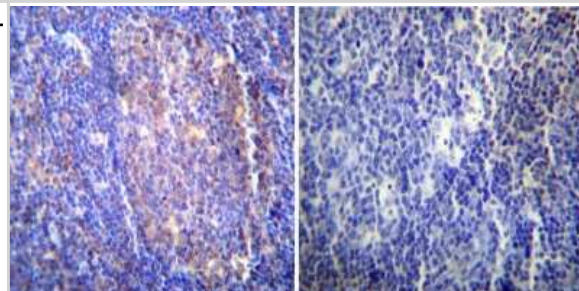
Immunocytochemistry/Immunofluorescence: Hsp70 / Hsc70 Antibody (13D3) [NB120-2788] - Analysis of HSC70 using HSC70 Monoclonal antibody (13D3) shows staining in HeLa cells. HSC70 staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing HSC70 at a dilution of 1:20-1:200 over night at 4C, washed with PBS and incubated with a DyLight-488 conjugated.



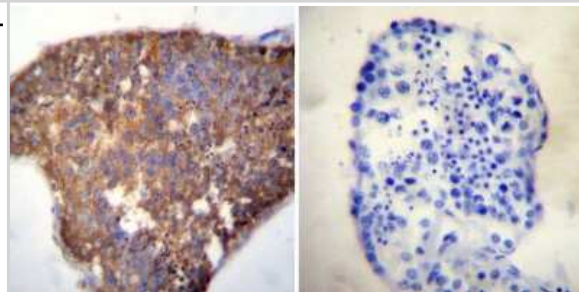
Immunocytochemistry/Immunofluorescence: Hsp70 / Hsc70 Antibody (13D3) [NB120-2788] - Analysis of HSC70 using HSC70 Monoclonal antibody (13D3) shows staining in MCF-7 cells. HSC70 staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown. Cells were grown on chamber slides and fixed with formaldehyde prior to staining. Cells were probed without (control) or with or an antibody recognizing HSC70 at a dilution of 1:20-1:200 C, washed with PBS and incubated with a DyLight-488 conjugated.



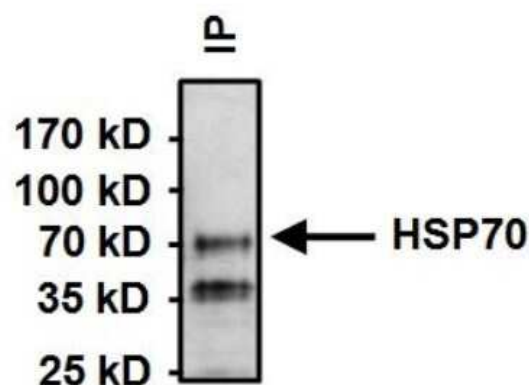
Immunohistochemistry-Paraffin: Hsp70 / Hsc70 Antibody (13D3) [NB120-2788] - Both normal and cancer biopsies of deparaffinized human Tonsil tissue.



Immunohistochemistry-Paraffin: Hsp70 / Hsc70 Antibody (13D3) [NB120-2788] - Both normal and cancer biopsies of deparaffinized human Testis tissue.



Immunoprecipitation: Hsp70 / Hsc70 Antibody (13D3) [NB120-2788] - Analysis of HSC70 was performed on HeLa cells. Antigen-antibody complexes were formed by incubating 500ug whole cell lysate with 2ul of HSC70 monoclonal antibody overnight on a rocking platform at 4C. The immune complexes were captured on 50ul Protein A/G Plus Agarose, washed extensively, and eluted with Lane Marker Reducing Sample Buffer. Samples were resolved on a 4-20% Tris-HCl polyacrylamide gel, transferred to a PVDF membrane, and blocked with 5% BSA/TBST for at least 1 hour. The membrane was probed with a HSC70 monoclonal antibody at a dilution of 1:1000 overnight rotating at 4C, washed in TBST, and probed with goat anti-mouse IgM-HRP secondary antibody for at least 1 hour. Chemiluminescent detection was performed using SuperSignal West Dura.



Publications

M Rovira, R Sereda, D Pladevall-, V Ramponi, I Marin, M Maus, J Madrigal-M, A Díaz, F García, J Muñoz, AM Cuervo, M Serrano The lysosomal proteome of senescent cells contributes to the senescence secretome *Aging Cell*, 2022-09-10;0(0):e13707. 2022-09-10 [PMID: 36087066]

Mario Fernández Comaduran, Sandra Minotti, Suleima Jacob-Tomas, Javeria Rizwan, Nancy Larochelle, Richard Robitaille, Chantelle F. Sephton, Maria Vera, Josephine N. Nalbantoglu, Heather D. Durham Impact of histone deacetylase inhibition and arimoclomol on heat shock protein expression and disease biomarkers in primary culture models of familial ALS *Cell Stress & Chaperones* 2024-04-01 [PMID: 38570009]

Li J, Yao H, Zhao F et al. Pycard deficiency inhibits microRNA maturation and prevents neointima formation by promoting chaperone-mediated autophagic degradation of AGO2/argonaute 2 in adipose tissue *Autophagy* 2023-11-14 [PMID: 37963060] (IHC-P, IP, Mouse)

Details:

IHC-P Dilution 1:300; IP Dilution: 1?µg of antibody was added to 500?µg of cell lysate and incubated overnight at 4°C, and then incubated with protein A agarose beads for 4?h

Choi YJ, Yun SH, Yu J et al. Chaperone-mediated autophagy dysregulation during aging impairs hepatic fatty acid oxidation via accumulation of NCoR1 *Molecular metabolism* 2023-07-29 [PMID: 37524243] (WB)

Bourdenx M, Mart□n-Segura A, Scrivo A et al. Chaperone-mediated autophagy prevents collapse of the neuronal metastable proteome *Cell* 2021-05-01 [PMID: 33891876]

Idera, A;Sharkey, LM;Kurauchi, Y;Kadoyama, K;Paulson, HL;Katsuki, H;Seki, T; Wild-type and pathogenic forms of ubiquilin 2 differentially modulate components of the autophagy-lysosome pathways *Journal of pharmacological sciences* 2023-07-01 [PMID: 37257946] (Western Blot, Human)

Ueda E, Ohta T, Konno A et al. D-Cysteine Activates Chaperone-Mediated Autophagy in Cerebellar Purkinje Cells via the Generation of Hydrogen Sulfide and Nrf2 Activation *Cells* 2022-04-05 [PMID: 35406792] (WB)

Wang D, Tan KS, Zeng W et al. Hepatocellular BChE as a therapeutic target to ameliorate hypercholesterolemia through PRMT5 selective degradation to restore LDL receptor transcription *Life sciences* 2022-01-19 [PMID: 35065166]

Welsch T, Younsi A, et al. Eps8 is recruited to lysosomes and subjected to chaperone-mediated autophagy in cancer cells. *Exp Cell Res* 2010-07-15 [PMID: 20184880] (WB, Human)

Caballero B, Bourdenx M, Luengo E et al. Acetylated tau inhibits chaperone-mediated autophagy and promotes tau pathology propagation in mice *Nature communications* 2021-04-14 [PMID: 33854069]

Chang A H, Jeong J et al. Iron regulatory protein 2 turnover through a nonproteasomal pathway. *J Biol Chem* 2011-08-07 [PMID: 21558272] (WB, Human)

Ueno M, Suzuki J et al. Cardiac overexpression of perilipin 2 induces dynamic steatosis: prevention by hormone-sensitive lipase. *Am J Physiol Endocrinol Metab* 2017-01-12 [PMID: 28851734] (IF/IHC, Mouse)

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| NB720-B | Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin] |
| NBP2-62224 | Mouse IgM Isotype Control (PFR-03) |
| NBP1-30278 | Recombinant Human HSPA8/HSC71/Hsc70 His Protein |

Limitations

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