

Product Datasheet

HSP70/HSPA1A Antibody (3A3)

NB600-1469

Unit Size: 50uL

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

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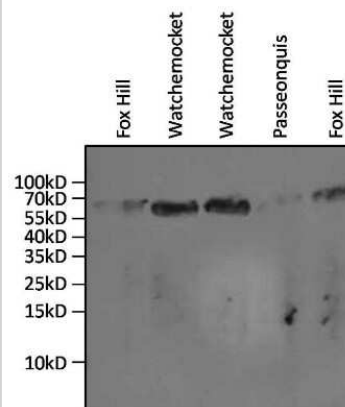


NB600-1469**HSP70/HSPA1A Antibody (3A3)**

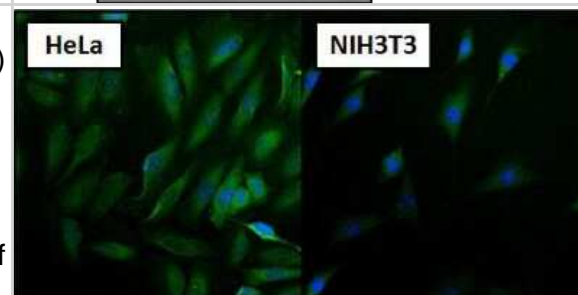
Product Information	
Unit Size	50uL
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	3A3
Preservative	0.05% Sodium Azide
Isotype	IgG1
Purity	Unpurified
Buffer	Ascites diluted with PBS
Product Description	
Host	Mouse
Gene ID	3303
Gene Symbol	HSPA1A
Species	Human, Mouse, Rat, Porcine, Amphibian, Avian, Drosophila, Fish, Insect, Plant, Primate, Yeast
Reactivity Notes	Arthropod and Mollusca. Insect reactivity reported in scientific literature (PMID: 20798487). 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	Epitope mapping with a panel of HSP70 deletion mutants suggests that the epitope recognized is located between amino acids 504-617 of human HSP70, a region that has been shown to be involved in stress-induced nucleolar localization.
Immunogen	Human recombinant HSP70 overexpressed in E. coli.
Product Application Details	
Applications	Western Blot, Gel Super Shift Assays, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot 1:1000 - 1:5000, Immunohistochemistry 1:10 - 1:500, Immunocytochemistry/ Immunofluorescence 1:10-1:500, Immunoprecipitation 2 ul, Immunohistochemistry-Paraffin 1:200, Gel Super Shift Assays 1:1 - 1:100
Application Notes	WB: Detects an approx. proteins from ~70 kDa to ~78 kDa representing different members of the HSP70 family.

Images

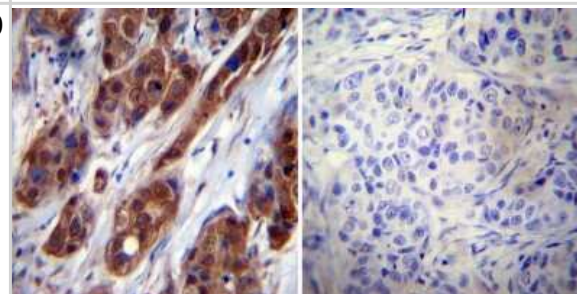
Western Blot: HSP70/HSPA1A Antibody (3A3) [NB600-1469] - Analysis of 20ul of gill tissue lysates from the salt marsh mussel, *Guekensia demissa*, isolated from various coves in Rhode Island (indicated above the lanes).



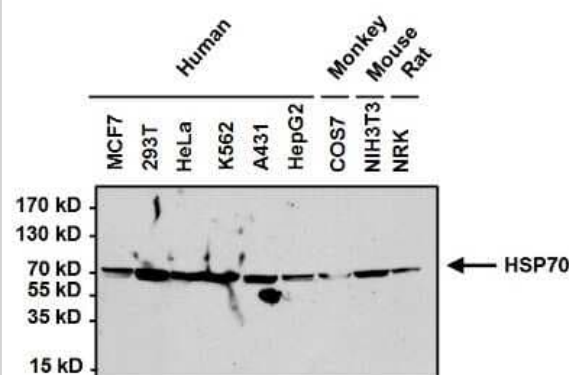
Immunocytochemistry/Immunofluorescence: HSP70/HSPA1A Antibody (3A3) [NB600-1469] - Analysis of Heat Shock Protein 70 (Hsp70) (green) in HeLa and NIH3T3 cells. Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature and blocked with 1% Blocker BSA for 15 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.



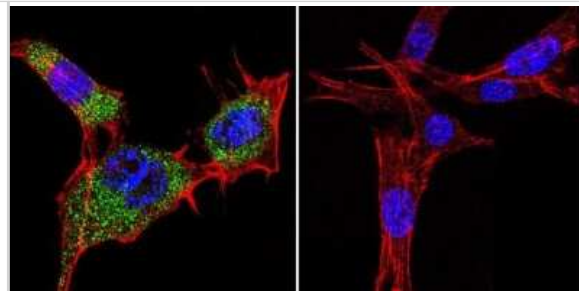
Immunohistochemistry-Paraffin: HSP70/HSPA1A Antibody (3A3) [NB600-1469] - Both normal and cancer biopsies of deparaffinized human Breast carcinoma tissue.



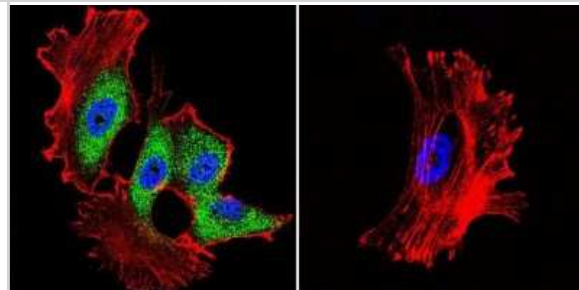
Western Blot: HSP70/HSPA1A Antibody (3A3) [NB600-1469] - Proteins were transferred to a PVDF membrane and blocked with 5% BSA/TBST for at least 1 hour. The membrane was probed with a Hsp70 monoclonal antibody at a dilution of 1:1000 overnight at 4C on a rocking platform, washed in TBS-0.1%Tween 20, and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:20,000 for at least 1 hour.



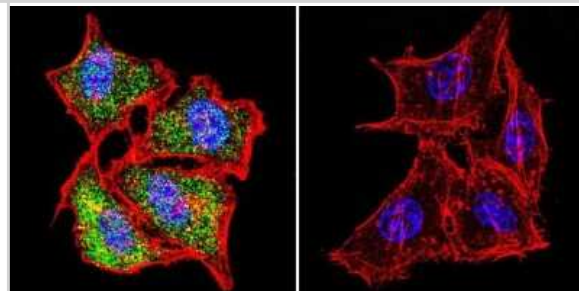
Immunocytochemistry/Immunofluorescence: HSP70/HSPA1A Antibody (3A3) [NB600-1469] - Analysis of Heat Shock Protein 70 using Heat Shock Protein 70 Monoclonal antibody (3A3) shows staining in NIH-3T3 cells. Heat Shock Protein 70 staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (blue) is shown.



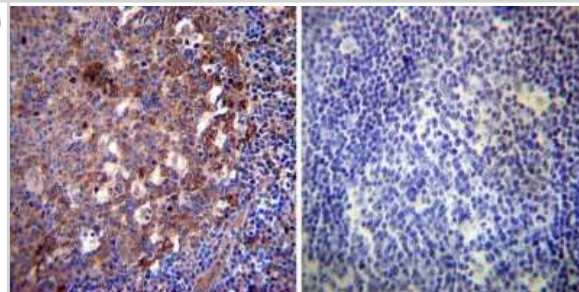
Immunocytochemistry/Immunofluorescence: HSP70/HSPA1A Antibody (3A3) [NB600-1469] - Analysis of Heat Shock Protein 70 using Heat Shock Protein 70 Monoclonal antibody (3A3) shows staining in MCF-7 cells. Heat Shock Protein 70 staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (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 Heat Shock Protein 70 at a dilution of 1:100-1:200 over night at 4C, washed with PBS and incubated with a DyLight-488 conjugated.



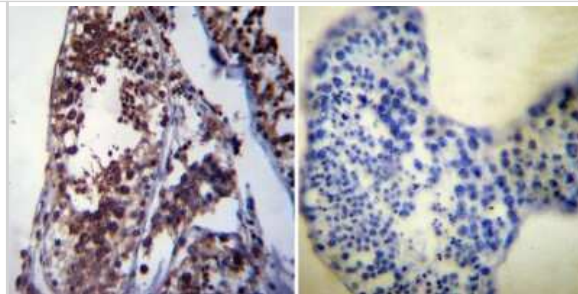
Immunocytochemistry/Immunofluorescence: HSP70/HSPA1A Antibody (3A3) [NB600-1469] - Analysis of Heat Shock Protein 70 using Heat Shock Protein 70 Monoclonal antibody (3A3) shows staining in HeLa cells. Heat Shock Protein 70 staining (green), F-Actin staining with Phalloidin (red) and nuclei with DAPI (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 Heat Shock Protein 70 at a dilution of 1:100-1:200 over night at 4C, washed with PBS and incubated with a DyLight-488 conjugated.



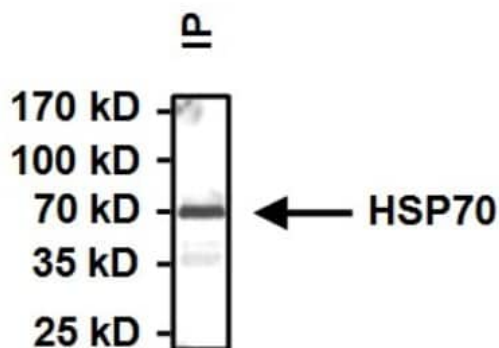
Immunohistochemistry-Paraffin: HSP70/HSPA1A Antibody (3A3) [NB600-1469] - Both normal and cancer biopsies of deparaffinized human Tonsil tissue.



Immunohistochemistry-Paraffin: HSP70/HSPA1A Antibody (3A3) [NB600-1469] - Both normal and cancer biopsies of deparaffinized human Testis tissue.



Immunoprecipitation: HSP70/HSPA1A Antibody (3A3) [NB600-1469] - Immunoprecipitation of Heat Shock Protein 70 (Hsp70) was performed on HeLa cells. Antigen:antibody complexes were formed by incubating 500ug whole cell lysate with 2ug of Hsp70 monoclonal antibody overnight on a rocking platform at 4C. The immune complexes were captured on 50ul Protein A/G Plus Agarose at a dilution of 1:1000 overnight rotating at 4C, washed in TBST, and probed with goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:20,000 for at least 1 hour.



Publications

Wang X, Duan C, Li Y et al. Sodium butyrate reduces overnutrition-induced microglial activation and hypothalamic inflammation International Immunopharmacology 2022-10-01 [PMID: 35917736] (WB, Mouse)

Boussadia Z, Lamberti J, et al. Acidic microenvironment plays a key role in human melanoma progression through a sustained exosome mediated transfer of clinically relevant metastatic molecules. J Exp Clin Cancer Res 2018-10-05 [PMID: 30290833] (WB, Human)

Blatzer M, Blum G, Jukic E et al. Blocking Hsp70 enhances the efficiency of Amphotericin B treatment in resistant *Aspergillus terreus* strains Antimicrob. Agents Chemother. 2015-04-13 [PMID: 25870060] (WB, Human)



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