Product Datasheet

gp96/HSP90B1/GRP94 Antibody (SPM249)
NBP2-44690-0.1mg

Unit Size: 0.1 mg

Store at 4C.

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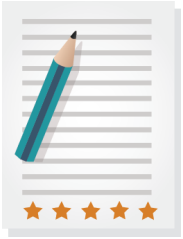
Updated 10/23/2024 v.20.1



NBP2-44690-0.1mg

gp96/HSP90B1/GRP94 Antibody (SPM249)

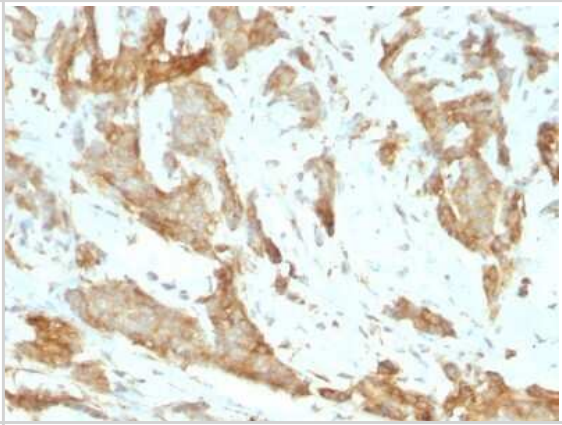
Product Information	
Unit Size	0.1 mg
Concentration	0.2 mg/ml
Storage	Store at 4C.
Clonality	Monoclonal
Clone	SPM249
Preservative	0.05% Sodium Azide
Isotype	IgG2a Kappa
Purity	Protein A or G purified
Buffer	10 mM PBS with 0.05% BSA
Target Molecular Weight	94 kDa

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. (NBP3-11500) Antibody with azide - store at 2 to 8C. Antibody without azide - store at -20 to -80C.
Host	Rat
Gene ID	7184
Gene Symbol	HSP90B1
Species	Human, Mouse, Rat, Porcine, Bovine, Canine, Chicken, Equine, Guinea Pig, Hamster, Monkey, Rabbit, Sheep, Xenopus
Marker	Endoplasmic Reticulum Marker
Specificity/Sensitivity	Recognizes a protein of 94kDa, which is identified as the glucose-regulated protein 94 (grp94) and also tumor rejection antigen (gp96). Grp94 shows a high degree of sequence homology with the heat shock protein 90 (hsp90). This monoclonal antibody is highly specific to grp94 and shows minimal cross-reaction with other members of the HSP90 family. Grps are a class of proteins unresponsive to heat shock and are induced by glucose deprivation. Grp94 has been briefly studied as a prognostic factor in breast cancer.
Immunogen	Purified glucose regulated protein 94 (grp94) from chicken oviducts (Uniprot: P14625)

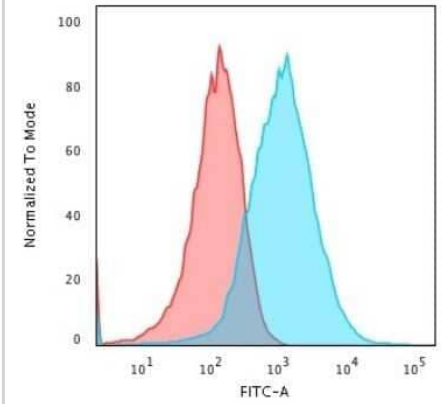
Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1-2 ug/ml, Flow Cytometry 1-2 ug/million cells, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 1-2 ug/ml, Immunohistochemistry-Paraffin 1-2 ug/ml
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.

Images

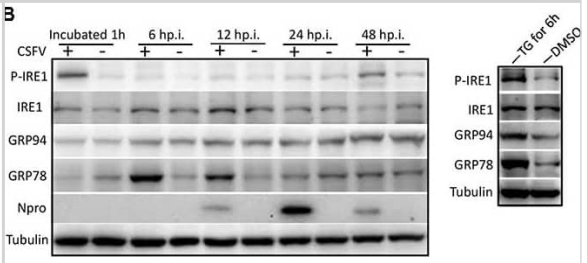
Immunohistochemistry-Paraffin: gp96/HSP90B1/GRP94 Antibody (SPM249) [NBP2-44690] - Human Breast Carcinoma stained with GRP94 Monoclonal Antibody (SPM249).



Flow Cytometry: gp96/HSP90B1/GRP94 Antibody (SPM249) [NBP2-44690] - Flow Cytometric Analysis of PFA-fixed HePG2 cells using gp96/HSP90B1/GRP94 Antibody (SPM249).followed by Goat anti-Rat-IgG-CF488 (Blue); Isotype Control (Red).



Western Blot: gp96/HSP90B1/GRP94 Antibody (SPM249) [NBP2-44690] - Classical swine fever virus (CSFV) infection induces the activation of UPR. (A) RNA extracted from CSFV-infected cells was quantified for the expression of UPR genes Xbp1(s), GRP78, GRP94, EDEM-1, ATF4, ATF6, CHOP, Calreticulin, Calnexin, & ERp57 using q-PCR. Mock-infected PK-15 & Thapsigargin (TG)-treated PK-15 were used as negative & positive controls, respectively, & the fold induction was calculated compared to mock cells at the same time point. Error bars represent the mean ± SD of 3 independent experiments; one-way ANOVA test; □P < 0.05; □□P < 0.01; □□□P < 0.001. (B,D,E) Immunoblotting analysis of components of UPR signaling pathways during a time course of CSFV infection. Mock or CSFV-infected PK-15 cells lysates were collected at the indicated time points. Lysates were analyzed for the activation of the IRE1 (B), PERK (D) & ATF6 (E) pathway by immunoblotting analysis. Tubulin was used as a loading control, & infection was confirmed by detecting the viral protein Npro. Results of a representative experiment of 2 independent experiments are shown. (C) RNA was collected as described above, & the splicing levels of XBP1 were analyzed with semi-quantitative PCR as described in materials & methods. The length of Xbp1(u) is 474 bp & Xbp1(s) is 448 bp. (F) The relative expression ratios of the targeted proteins/genes were analyzed by densitometric scanning. Error bars represent the mean ± SD of 2 independent experiments; one-way ANOVA test; □P < 0.05; □□P < 0.01; □□□P < 0.001. Image collected & cropped by CiteAb from the following publication (http://journal.frontiersin.org/article/10.3389/fmicb.2017.02129/full), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

He W, Xu H, Gou H et al. CSFV Infection Up-Regulates the Unfolded Protein Response to Promote Its Replication Front Microbiol. 2017-11-02 [PMID: 29163417] (WB, Porcine)

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Products Related to NBP2-44690-0.1mg

HAF005	Goat anti-Rat IgG Secondary Antibody [HRP]
NBP1-75398	Goat anti-Rat IgG (H+L) Secondary Antibody (Pre-adsorbed)
NBP1-43321-0.5mg	Rat IgG2a Kappa Light Chain Isotype Control (R2a)
NBP2-24698PEP	gp96/HSP90B1/GRP94 Antibody Blocking Peptide

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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.

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