

GRP78 Polyclonal Antibody

Catalog NumberPA5-11418

Product data sheet

Details		Species Reactivity	
Size	200 µL	Species reactivity	Human, Mouse
Host/Isotope	Rabbit / IgG	Published species	Human, Not Applicable
Class	Polyclonal	Tested Applications	
Type	Antibody	Flow Cytometry (Flow)	Dilution *1:10-1:50
Immunogen	Recombinant protein encoding full length human HSPA5	Immunohistochemistry (Paraffin) (IHC (P))	1:50-1:100
Conjugate	Unconjugated	Western Blot (WB)	1:1,000
Form	Liquid	Immunocytochemistry (ICC/IF)	1:10-1:50
Concentration	2 mg/mL	* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.	
Purification	Ammonium sulfate precipitation, Size-exclusion - Dialysis		
Storage buffer	PBS		
Contains	0.09% sodium azide		
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles		

Background/Target Information

GRP78 is a 78 kDa glucose regulated protein that belongs to the family of heat shock proteins that include HSP70. GRP78 is a resident protein of the endoplasmic reticulum (ER) and associates transiently with a variety of newly synthesized secretory and membrane proteins. GRP78 may also interact with mutant and misfolded proteins, marking them for degradation. The highly conserved sequence Lys-Asp-Glu-Leu (KDEL) is present at the C-terminus of GRP78 and other resident ER proteins including glucose regulated protein 94 (GRP94) and protein disulfide isomerase (PDI). The KDEL signal is recognized by the KDEL receptor and this interaction ensures recycling of escaped ER proteins back to the ER. GRP78's involvement in correct folding of proteins and degradation of misfolded proteins is via its interaction with DNAJC10, probably to facilitate the release of DNAJC10 from its substrate. GRP78 is critical for maintenance of cell homeostasis and the prevention of apoptosis. GRP78 protein levels have been shown to be a reliable biomarker of hypoglycemia and serves a neuroprotective function in neurons exposed to glutamate and oxidative stress. GRP78 levels are reduced in the brains of Alzheimer's Disease patients, and decreased expression of GRP78 is found associated with missense mutations in the human presenilin-1 (PS1) gene. Further, the induction of the GRP78 protein has been associated with the development of drug-resistance to antitumor drugs.

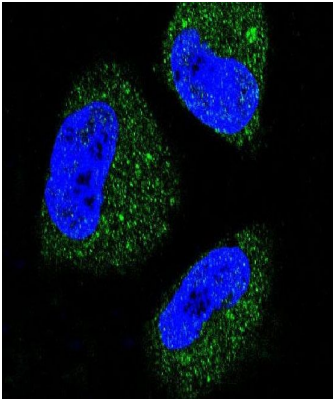
For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

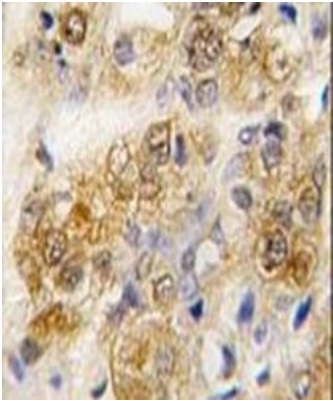
Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.

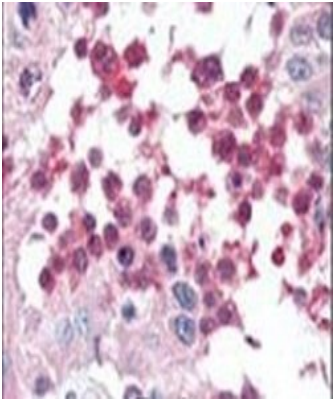
Product Images For GRP78 Polyclonal Antibody



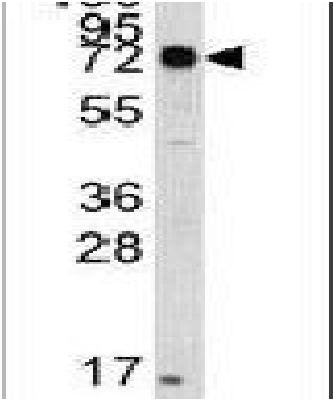
GRP78 Antibody (PA5-11418) in ICC/IF
Immunofluorescent analysis of NCI-H460 cells using a GRP78/HSPA5 polyclonal antibody (Product # PA5-11418) at a dilution of 1:10-50, followed by a fluor-conjugated goat anti-rabbit secondary antibody (green). Nuclei were stained with DAPI (blue).



GRP78 Antibody (PA5-11418) in IHC (P)
Immunohistochemical analysis of formalin-fixed, paraffin-embedded human prostate carcinoma tissue using a GRP78/HSPA5 polyclonal antibody (Product # PA5-11418), followed by HRP-conjugated secondary antibody and DAB staining.



GRP78 Antibody (PA5-11418) in IHC (P)
Immunohistochemical analysis of formalin-fixed, paraffin-embedded human testis tissue using a GRP78/HSPA5 polyclonal antibody (Product # PA5-11418), followed by HRP-conjugated secondary antibody and AEC staining.

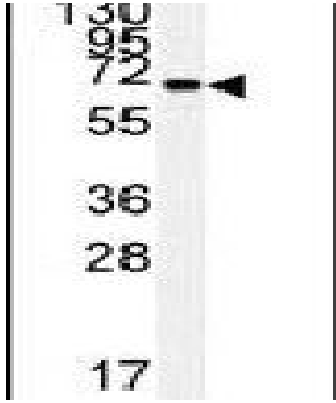


GRP78 Antibody (PA5-11418) in WB
Western blot analysis of GRP78/HSPA5 using a GRP78/HSPA5 polyclonal antibody (Product # PA5-11418) in mouse liver tissue lysate. HSPA5 (arrow) was detected using the purified Pab.

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

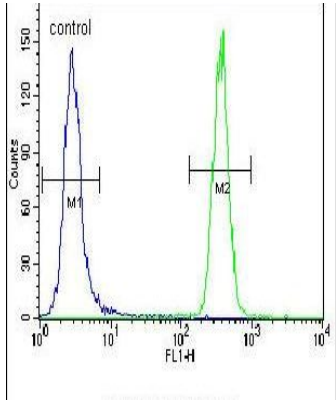
Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.



GRP78 Antibody (PA5-11418) in WB

Western blot analysis using a GRP78/HSPA5 polyclonal antibody (Product # PA5-11418) in HL-60 cell lysates (35 µg per lane).



GRP78 Antibody (PA5-11418) in Flow

Flow cytometry analysis of HeLa cells using a GRP78/HSPA5 polyclonal antibody (Product # PA5-11418) (right) compared to a negative control cell (left) at a dilution of 1:10-50, followed by a FITC-conjugated goat anti-rabbit antibody

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization.

Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample.

NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.