

## Basic Information

<b>Product Name</b>	Anti-GRP78/BIP/HSPA5 Antibody	
<b>Gene Name</b>	HSPA5	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, IHC, ICC/IF	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the C-terminus of human GRP78 BiP, identical to the related mouse and rat sequences.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	78 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

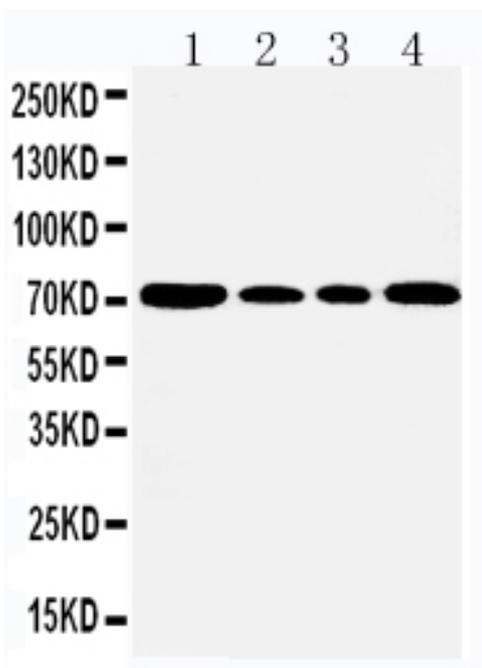
HSPA5(heat shock 70kDa protein 5) also known as glucose-regulated protein, 78kD(GRP78) or BiP, is a member of the heat-shock protein-70(HSP70) family and is involved in the folding and assembly of proteins in the endoplasmic reticulum. BiP is also an essential component of the translocation machinery, as well as playing a role in retrograde transport across the ER membrane of aberrant proteins destined for degradation by the proteasome. The HSPA5 gene is mapped on 9q33.3. Shen et al.(2002)°Concluded that HSPA5 retains ATF6 in the ER by inhibiting its Golgi localization signals and that dissociation of HSPA5 during ER stress allows ATF6 to be transported to the Golgi. The findings of Shen

et al.(2002) demonstrated that HSPA5 is a key element in sensing the folding capacity within the ER.

## Reference

Anti-GRP78/BIP/HSPA5 Antibody被引用在15文献中。

## Selected Validation Data



Western blot analysis of GRP78/BIP/HSPA5 using anti-GRP78/BIP/HSPA5 antibody (BA2042). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Rat Testis tissue lysates,

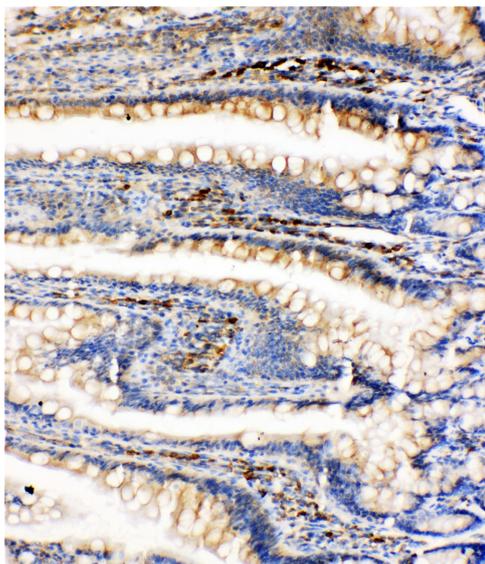
Lane 2: A549 whole cell lysates,

Lane 3: MCF-7 whole cell lysates,

Lane 4: HELA whole cell lysates.

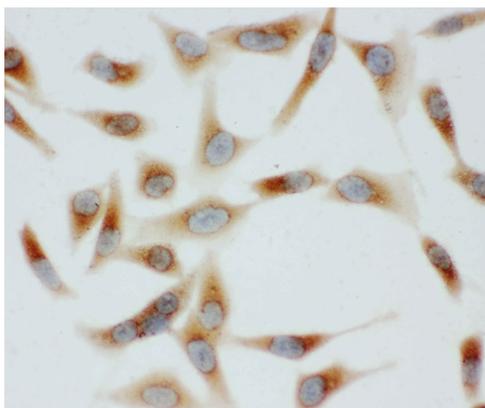
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-GRP78/BIP/HSPA5 antigen affinity purified polyclonal antibody (BA2042) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for GRP78/BIP/HSPA5 at approximately 78 kDa. The expected band size for GRP78/BIP/HSPA5 is at 72 kDa.



IHC analysis of GRP78/BIP/HSPA5 using anti-GRP78/BIP/HSPA5 antibody (BA2042).

GRP78/BIP/HSPA5 was detected in a paraffin-embedded section of rat intestine tissue. The tissue section was incubated with rabbit anti-GRP78/BIP/HSPA5 Antibody (BA2042) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC analysis of GRP78/BIP/HSPA5 using anti- GRP78/BIP/HSPA5 antibody (BA2042).

GRP78/BIP/HSPA5 was detected in an immunocytochemical section of HeLa cells. The section was incubated with rabbit anti-GRP78/BIP/HSPA5 Antibody (BA2042) at a dilution of 1:100. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.