

Basic Information

Product Name	Anti-GRP78/BIP/HSPA5 Antibody	
Gene Name	HSPA5	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS , 0.02% Na ₃ N , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human GRP78 BiP (592-624aa ETMEKAVEEKIEWLESHQDADIEDFKAKKKELE), identical to the related mouse and rat sequences.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	78KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 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. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

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3文献中。

Selected Validation Data

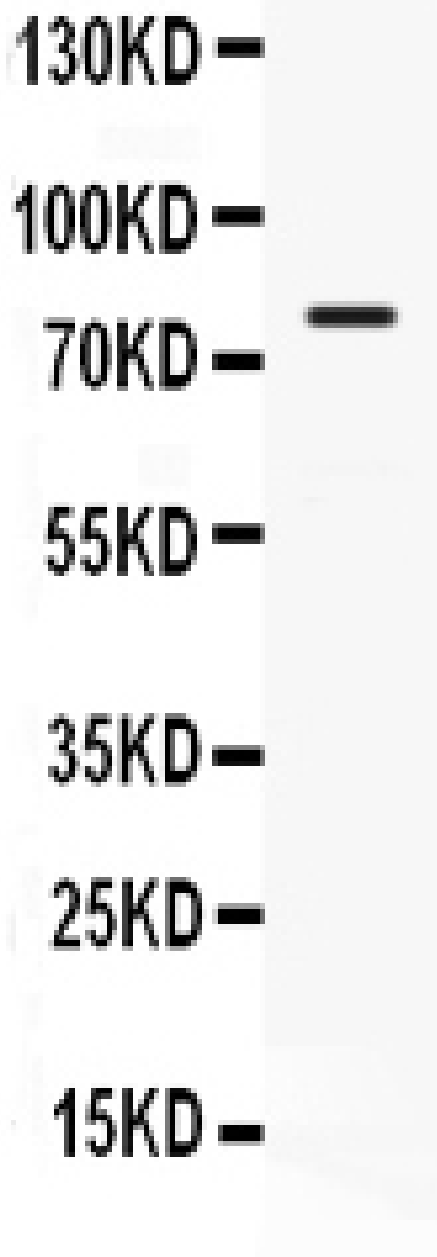


Figure 1. Western blot analysis of Anti-HSPA5 antibody (PB0669).

The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: HELA whole cell lysates, Use rabbit Anti-HSPA5 1:1000, probed with a goat Anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for HSPA5 at approximately 78KD. The expected band size for HSPA5 is at 72KD.

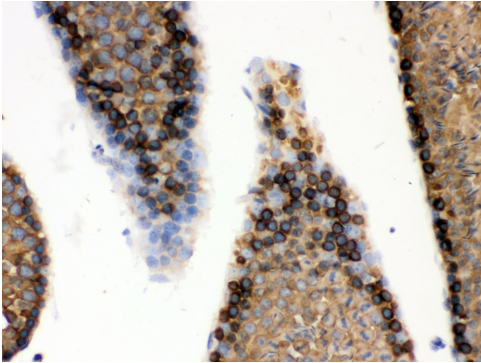


Figure 2. IHC analysis using Anti-HSPA5 antibody (PB0669) detected in paraffin-embedded section of mouse testis tissue. Biotinylated goat Anti-rabbit IgG was used as secondary antibody. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.