

## Basic Information

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Product Name</b>       | Anti-GRP78/BIP/HSPA5 Antibody                                                                                                                                                                                                                                                                                                                                                                                       |  |
| <b>Gene Name</b>          | HSPA5                                                                                                                                                                                                                                                                                                                                                                                                               |  |
| <b>Source</b>             | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| <b>Isotype</b>            | IgG                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| <b>Species Reactivity</b> | human, mouse, rat                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| <b>Tested Application</b> | WB, IHC, IHC-F, ICC                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| <b>Contents</b>           | 500 ug/ml antibody with PBS , 0.02% NaN <sub>3</sub> , 1 mg BSA and 50% glycerol.                                                                                                                                                                                                                                                                                                                                   |  |
| <b>Immunogen</b>          | A synthetic peptide corresponding to a sequence at the C-terminus of human GRP78 BiP(603-617aa EWLESHQDADIEDFK), identical to the related mouse and rat sequences.                                                                                                                                                                                                                                                  |  |
| <b>concentration</b>      | 500 ug/ml                                                                                                                                                                                                                                                                                                                                                                                                           |  |
| <b>Purification</b>       | Immunogen affinity purified.                                                                                                                                                                                                                                                                                                                                                                                        |  |
| <b>Observed MW</b>        | 78KD                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| <b>Dilution Ratios</b>    | Western blot(WB): 1:500-2000<br>Immunohistochemistry in paraffin section (IHC): 1:50-400<br>Immunohistochemistry in frozen section (IHC-F): 1:50-400<br>Immunocytochemistry: 1:50-400<br>(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.

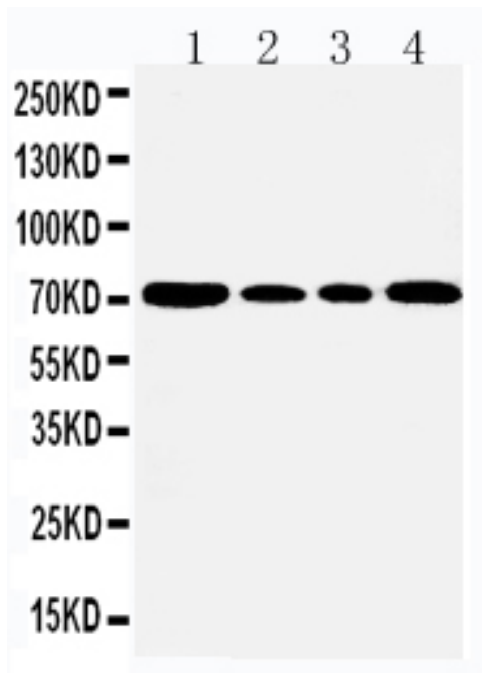
## Background Information

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4文献中。

## Selected Validation Data



Lane 1: Rat Testis Tissue Lysate  
Lane 2: A549 Cell Lysate  
Lane 3: MCF-7 Cell Lysate  
Lane 4: HELA Cell Lysate