

Basic Information

Product Name	Anti-GRP78/BIP/HSPA5 Antibody
Gene Name	HSPA5
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, ELISA
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.
Immunogen	E.coli-derived human GRP78/BIP/HSPA5 recombinant protein (Position: D78-S607).
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	78 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Enzyme linked immunosorbent assay (ELISA):1:100-1000

Storage

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

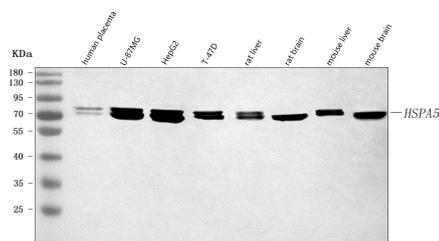
Background Information

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3文献中。

Selected Validation Data



Western blot analysis of anti-GRP78/BIP/HSPA5 antibody (A00955).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,

Lane 2: human U-87MG whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

Lane 4: human T-47D whole cell lysates,

Lane 5: rat liver tissue lysates,

Lane 6: rat brain tissue lysates,

Lane 7: mouse liver tissue lysates,

Lane 8: mouse brain tissue 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 (A00955) 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 78 kDa.