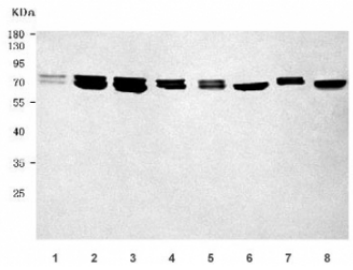
GRP78 Antibody / BiP / HSPA5 (RQ8124)

Catalog No.	Formulation	Size
RQ8124	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P11021
Applications	Western Blot : 0.5-1ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This GRP78 antibody is available for research use only.



Western blot testing of 1) human placenta, 2) human U-87 MG, 3) human HepG2, 4) human T-47D, 5) rat liver, 6) rat brain, 7) mouse liver and 8) mouse brain tissue lysate with GRP78 antibody. Predicted molecular weight: ~73 kDa, but routinely observed at 70-78 kDa.

Description

HSPA5 (heat shock 70kDa protein 5), also known as glucose-regulated protein, 78kD (GRP78), BiP (Binding-immunoglobulin protein), 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. GRP78/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. Shen et al. (2002) concluded that GRP78 retains ATF6 in the ER by inhibiting its Golgi localization signals and that dissociation of GRP78 during ER stress allows ATF6 to be transported to the Golgi. The findings of Shen et al. (2002) demonstrated that GRP78 is a key element in sensing the folding capacity within the ER.

Application Notes

Optimal dilution of the GRP78 antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids D78-S607) was used as the immunogen for the GRP78 antibody.

Storage

After reconstitution, the GRP78 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.