

## **GRP78 Mouse Polyclonal Antibody**

# Catalog #: EAB10513

Host/Isotype	Clonality	Applications	MW (kDa)	Reactivity
Mouse IgG1	Monoclonal	WB, IHC-P, IF	78	Human, Rat

### **Applications Dilutions**

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

WB(Western Blotting)	1:1000-5000	
IHC-P(Immunohistochemistry-Paraffin)	1:50-300	
IF(Immunofluorescence)	1:50-300	

### **Product Information**

Conjugate	Unconjugate
Specificity	GRP78 Mouse Monoclonal Antibody detects endogenous levels of GRP78 protein.
Purification	Affinity purification
Concentration	1mg/ml
Format	Liquid
Formulation	In PBS, pH 7.4, Containing 0.02% sodium azide, 0.5% BSA and 50% Glycerol
Shipping	Gel Pack
Storage	Store at -20°C least 1 year from the date of shipment. Avoid repeated freeze/thaw cycles. Aliquots may be stored at +4°C for 1-2 weeks
UniProt ID	<u>P11021</u>
Entrez-Gene Id	3309

### **Product Description**

GRP78 (also designated HSPA5, BIP) is a member of the heat shock protein 70 (HSP70) family. This protein localizes to the lumen of the endoplasmic reticulum (ER) where it operates as a typical HSP70 chaperone involved in the folding and assembly of proteins in the ER and is a master regulator of ER homeostasis. During cellular stress, as during viral infection or tumorogenesis, this protein interacts with the transmembrane stress sensor proteins PERK (protein kinase R-like endoplasmic reticulum kinase), IRE1 (inositol-requiring kinase 1), and ATF6 (activating transcription factor 6) where it acts as a repressor of the unfolded protein response (UPR) and also plays a role in cellular apoptosis and senescence. Elevated expression and atypical translocation of this protein to the cell surface has been reported in viral infections and some types of cancer cells. At the cell surface this protein may facilitate viral attachment and entry to host cells. This gene is a therapeutic target for the treatment of coronavirus diseases and chemoresistant cancers.

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