

Product datasheet for **TA346972**

GRP78 (HSPA5) Mouse Monoclonal Antibody [Clone ID: 9E4-2A7-H6]

Product data:

Product Type:	Primary Antibodies
Clone Name:	9E4-2A7-H6
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1:1000, IF: 1:50
Reactivity:	Human, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	The immunogen for HSPA5 antibody: purified recombinant human BiP/GRP78 (C-terminus) protein fragments expressed in E.coli.
Formulation:	Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.02% sodium azide and 50% glycerol.
Purification:	Affinity purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	78 kDa
Gene Name:	heat shock protein family A (Hsp70) member 5
Database Link:	NP_005338 Entrez Gene 25617 Rat Entrez Gene 3309 Human P11021



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Background:	The 78 kDa glucose regulated protein/BiP (GRP78) belongs to the family of ~70 kDa heat shock proteins (HSP 70). GRP78 is a resident protein of the endoplasmic reticulum (ER) and may associate transiently with a variety of newly synthesized secretory and membrane proteins or permanently with mutant or defective proteins that are incorrectly folded, thus preventing their export from the ER lumen. GRP78 is a highly conserved protein that is essential for cell viability. The highly conserved sequence Lys-Asp-Glu-Leu (KDEL) is present at the C terminus of GRP78 and other resident ER proteins including glucose regulated protein 94 (GRP 94) and protein disulfide isomerase (PDI). The presence of carboxy terminal KDEL appears to be necessary for retention and appears to be sufficient to reduce the secretion of proteins from the ER. This retention is reported to be mediated by a KDEL receptor.
Synonyms:	BIP; GRP78; HEL-S-89n; MIF2
Protein Families:	Druggable Genome
Protein Pathways:	Antigen processing and presentation, Prion diseases