

OriGene Technologies, Inc.

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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

Recommend 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

Predicted Protein Size: 78 kDa

Gene Name: heat shock protein family A (Hsp70) member 5

Database Link: NP 005338 Entrez Gene 25617 RatEntrez Gene 3309 Human

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

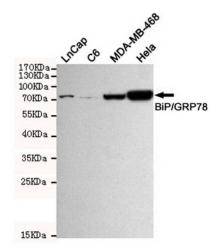
Protein Families: Druggable Genome



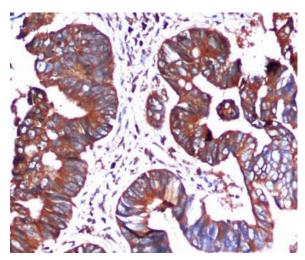


Protein Pathways: Antigen processing and presentation, Prion diseases

Product images:

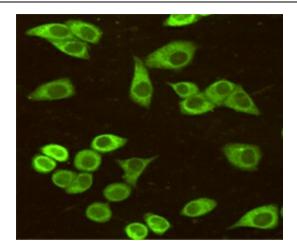


Western blot detection of BiP/GRP78 (C-terminus) in Hela, C6, Lncap and MDA-MB-468 cell lysates using BiP/GRP78 (C-terminus) mouse mAb (1:1000 diluted).Predicted band size:72KDa.Observed band size:78KDa.



Immunohistochemical analysis of paraffinembedded Colorectal cancer using BiP/GRP78 (Cterminus) Mouse mAb (1/100 dilution). Antigen retrieval was performed by pressure cooking in citrate buffer (pH 6.0).





Immunocytochemistry staining of HeLa cells fixed with 4% Paraformaldehyde and using anti-BiP/GRP78 (C-terminus) mouse mAb (dilution 1.50)