



## BiP/GRP78 (C-term)

### Mouse monoclonal Antibody

#53561

**Catalog Number:** 53561

**Amount:** 100µg/100µl

**Swiss-Prot No. :** P11021

**Gene name:** hspa5

**Gene id:** 3309

**Clone Number:** 9E4-2A7-H6

**Form of Antibody:** Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol

**Storage/Stability:** Store at -20°C/1 year

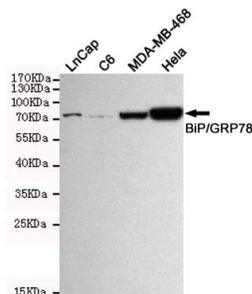
**Immunogen:** Purified recombinant human BiP/GRP78(C-term) protein fragments expressed in E.coli.

**Purification:** affinity-chromatography

**Specificity/Sensitivity:** This antibody detects endogenous levels of BiP/GRP78(C-term) and does not cross-react with related proteins

**Reactivity:** Human, Rat

**Applications:** Predicted MW: 78kd WB: 1:1000 ICC:1:50



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.

**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.