

## Product datasheet for **AM50344PU-N**

### GRP78 (HSPA5) Mouse Monoclonal Antibody [Clone ID: AT3D2]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	AT3D2
Applications:	ELISA, WB
Recommended Dilution:	The antibody has been tested by ELISA, Western blot analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results. Recommended starting dilution is 1:1000.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant human BIP (20-650aa) purified from Baculo virus.
Formulation:	PBS, pH 7.4 containing 0.02% Sodium Azide and 10% Glycerol State: Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Protein-A affinity chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	heat shock protein family A (Hsp70) member 5
Database Link:	<a href="#">Entrez Gene 3309 Human</a> <a href="#">P11021</a>

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**Background:**

Binding immunoglobulin protein (BIP) also known as 78kDa glucose-regulated protein (GRP-78) or heat shock 70kDa protein 5 (HSPA5) is a HSP70 molecular chaperone located in the lumen of the endoplasmic reticulum (ER) that binds newly synthesized proteins as they are translocated into the ER, and maintains them in a state competent for subsequent folding and oligomerization. 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. BIP is an abundant protein under all growth conditions, but its synthesis is markedly induced under conditions that lead to the accumulation of unfolded polypeptides in the ER.

**Synonyms:**

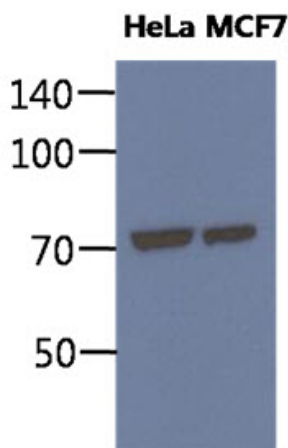
78 kDa glucose-regulated protein, Heat shock 70 kDa protein 5, BiP

**Protein Families:**

Druggable Genome

**Protein Pathways:**

Antigen processing and presentation, Prion diseases

**Product images:**


The cell lysates of HeLa and MCF7 (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human BIP antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.