

## Product datasheet for **AP08445PU-N**

### GRP78 (HSPA5) (550-600) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Immunohistochemistry on Paraffin Sections:</b> 10 µg/ml. <b>Western Blot:</b> 1 - 3 µg/ml.
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding amino acids 550-600 of human HSPA5.
Specificity:	This antibody recognizes Heat Shock 70kDa Protein 5 (HSPA5/GRP78).
Formulation:	PBS containing 0.2% Gelatin as stabilizer and 0.05% Sodium Azide as preservative. State: Aff - Purified State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Protein G Chromatography.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month 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 P11021</a>



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**Background:**

GRP78, is a 78 kDa glucose-regulated protein, also known as BiP or immunoglobulin heavy chain binding protein, is a stress-response protein which is induced by agents or conditions that adversely affect endoplasmic reticulum (ER) function. This protein is essential for the proper glycosylation, folding and assembly of many membrane bound and secreted proteins. Grp78 is critical for maintenance of cell homeostasis and the prevention of apoptosis. Grp78 protein levels have been shown to be a reliable biomarker of hypoglycemia as well as serving a neuroprotective function in neurons exposed to glutamate and oxidative stress. Grp78 levels are reduced in the brains of Alzheimer's Disease patients and decreased expression of Grp78 is found associated with missense mutations in the human presenilin-1 (PS1) gene. The induction of the Grp78 protein has been associated with the development of drug-resistance to antitumor drugs.

**Synonyms:**

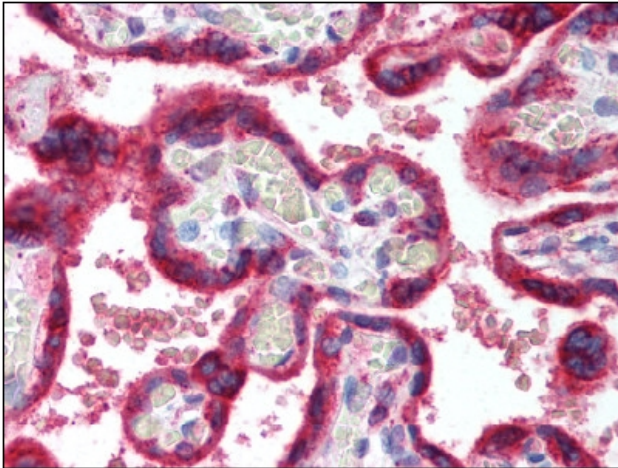
78 kDa glucose-regulated protein, Heat shock 70 kDa protein 5, BiP

**Protein Families:**

Druggable Genome

**Protein Pathways:**

Antigen processing and presentation, Prion diseases

**Product images:**

Placenta: Formalin-Fixed Paraffin-Embedded (FFPE)