

## GRP78 Monoclonal Antibody

### ORDERING INFORMATION

**Catalog No.:** 11144 (clone 3C5-1A4)  
**Size:** 100ug in PBS (2mg/ml), pH 7.4,  
0.09% sodium azide. Purified by Protein  
G affinity chromatography.

### BACKGROUND

GRP78 is a ubiquitously expressed,  
78kDa glucose-regulated protein  
commonly referred to as an  
immunoglobulin chain binding protein  
(BiP). Categorized as stress response  
proteins, BiPs play an important role in  
folding and assembly of nascent proteins  
and in scavenging of misfolded proteins in  
the endoplasmic reticulum lumen.

Translation of BiP is directed by an  
internal ribosomal entry site (IRES) in the  
5'-nontranslated region of BiP mRNA. BiP  
IRES activity increases when cells are  
heat-stressed. GRP78 is also important in  
maintenance of cell homeostasis and the  
prevention of apoptosis. Levels of GRP78  
protein are reduced in brains of  
Alzheimer's disease patients.

### SPECIFICATION SUMMARY

**Antigen:** Full-length recombinant rat  
GRP78.

**Accession no.:** NP-037215.1

**Gene ID:** 25617

**Host Species:** Mouse

**Antibody Class:** IgG1

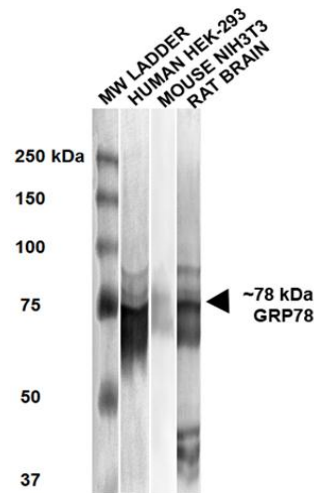
### SPECIFICITY

This antibody recognizes human, mouse,  
and rat GRP78.

### APPLICATIONS

*ELISA*

*Immunoblotting:* use at 1ug/ml. A band of  
~78kDa is detected.



Detection of GRP78 with #11144 at 1ug/ml.

These are recommended concentrations;  
enduser should determine optimal  
concentrations for their applications.

*Positive control:* HEK293 cell lysate.

### DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical  
to that used in the assay system.

### STORAGE AND STABILITY

This antibody is stable for at least one  
(1) year at -20°C. Avoid repeated  
freeze-thaw cycles.

*For in vitro investigational use only. Not  
intended for diagnostic or therapeutic  
applications.*