

## Anti-Grp75 (Mortalin) Monoclonal Antibody

### **ORDERING INFORMATION**

**Catalog No.:** 11121 (clone S52A-42)

**Size:** 100ug in PBS, pH 7.2; 50% glycerol, 0.09% sodium azide. Purified by Protein G affinity chromatography.

### **BACKGROUND**

Grp75, also known as mortalin, is a member of the Hsp70 family of chaperone proteins that is not heat-inducible but is induced under conditions of low glucose and other nutritional and environmental stresses.

Grp75 is localized primarily in the mitochondrial matrix where it collaborates with Hsp60 in the re-folding of proteins. Related forms may also be found in the

cytosol or on the cell surface. Other Grp75 functions include its ability to inactivate the tumor suppressor p53; it is over-expressed in many tumor cells and immortalized cell lines which suggest its role in tumor formation.

Grp75 is also implicated in cell aging as its overexpression appears to prolong the life span of human fibroblasts. Lastly, like the *E. coli* homolog DnaK, Grp75 has a cation-dependent ATPase activity considered central to its function as a chaperone.

### **SPECIFICATION SUMMARY**

**Antigen:** Synthetic peptide corresponding to SALM2 (Synaptic adhesion-like molecule 2)

**Host Species:** Mouse

**Antibody Class:** IgG1

### **SPECIFICITY**

This antibody recognizes an ~75kDa protein corresponding to the predicted molecular mass of Grp75 on SDS-PAGE immunoblots in human, mouse, and rat. Other species have not been investigated.

### **APPLICATIONS**

*Immunoblotting:* use at 1ug/ml. A band of ~75kDa is detected.

This is a recommended concentration. User should determine optimal concentrations for their application.

*Positive control:* Heat-shocked HeLa cell lysate

### **DILUTION INSTRUCTIONS**

Dilute in PBS or medium which 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 freezing and thawing.

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