

## Anti-LAMP2 Monoclonal Antibody

### ORDERING INFORMATION

**Catalog No.:** 56272 (clone GL2A7)  
**Size:** 100ug in PBS, pH 7.4, purified by Protein G affinity chromatography.

### BACKGROUND

Lysosome-associated membrane proteins (LAMP1 and LAMP2) are major constituents of the lysosomal membrane. These two proteins have closely related structures with 37% sequence homology. Both are transmembrane glycoproteins localized primarily in lysosomes and late endosomes. LAMP2 has also been detected at the plasma membrane of cells undergoing differentiation and activation and in cells that secrete lysosomal hydrolases. In addition, it has been suggested that LAMP2 is involved in cell-cell or cell-extracellular matrix interactions. Cell surface LAMP1 and LAMP2 promote adhesion of human peripheral blood mononuclear cells (PBMC) to vascular endothelium which suggests that the LAMP proteins are involved in adhesion of PBMC to sites of inflammation. Studies with LAMP2-deficient mice indicate that involvement of LAMP2 is critical in the conversion of early autophagic vacuoles to vacuoles which rapidly degrade their contents. Defects in LAMP2 are associated with Danon disease.

### SPECIFICATION SUMMARY

**Antigen:** Gluteraldehyde-fixed mouse liver lysosomes  
**Host Species:** Rat  
**Antibody Class:** IgG1  
**Preservatives:** 0.09% sodium azide  
**Other additives:** 50% glycerol

### SPECIFICITY

This antibody recognizes mouse and rabbit LAMP2 (~110 kDa).

### APPLICATIONS

*Immunocytochemistry:* use at 1-2ug/ml. This antibody will label lysosomes and late endosomes in cells that have been permeabilized with saponin.  
*Immunoprecipitation, Affinity purification:* user should determine optimal conditions for their applications. These are recommended concentrations. User should determine optimal concentrations for their application.  
*Positive control:* NIH-3T3 or J774 cells

### 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.

### REFERENCE

Granger, BL et al. 1990 J Biol Chem 265: 12036-12043.

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