

## Copper-Transporting ATPase1 Monoclonal Antibody

### ORDERING INFORMATION

**Catalog No.:** 56516 (clone S60-4)  
**Size:** 100ug in PBS (1mg/ml), pH 7.4,  
50% glycerol, 0.09% sodium azide.  
Purified by Protein G affinity  
chromatography.

### BACKGROUND

The copper efflux transporters ATP7A and ATP7B sequester intracellular copper into the vesicular secretory pathway for export from cells. ATP7A (also known as Copper-Transporting ATPase1) functions as a transmembrane copper-translocating P-type ATPase and plays a vital role in systemic copper absorption in the gut and copper reabsorption in the kidney. Although ATP7A is not detectable in most normal tissues, it is expressed in many common tumor types. Increased expression of ATP7A renders tumor cells resistant to cisplatin and carboplatin.

### SPECIFICATION SUMMARY

**Antigen:** Synthetic peptide corresponding to aa 42-61 (cytoplasmic C-terminus) of human Copper-Transporting ATPase1 (accession no. NP\_000043.3).

**Host Species:** Mouse

**Antibody Class:** IgG2b

### SPECIFICITY

This antibody recognizes human, mouse, and rat Copper-Transporting ATPase1.

### APPLICATIONS

*Immunoblotting:* use at 1-2ug/ml. A band of ~180kDa is detected.



Immunoblot on rat brain membranes.

*Immunohistochemistry:* use at 1-5ug/ml. These are recommended concentrations. Enduser should determine optimal concentrations for their applications.  
*Positive control:* rat brain membranes.

### DILUTION INSTRUCTIONS

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

### STORAGE AND STABILITY

This product is stable for at least 1 year at -20°C. Freeze in multiple aliquots to avoid repeated freeze-thaw cycles.

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