

## Thymidine Kinase Monoclonal Antibody

### **ORDERING INFORMATION**

**Catalog No.:** 34003 (3B3.E11)

**Size:** 200 ug Protein G-purified antibody in PBS, pH 7.4.

### **BACKGROUND**

Thymidine kinase (TK) belongs to a group of enzymes such as dihydrofolate reductase, thymidylate synthase, and DNA polymerase that are involved in DNA synthesis and precursor production. High levels of these enzymes are present in proliferating cells, and low levels are found in resting cells, due to multiple regulatory mechanisms that ensure exclusive expression of these enzymes in replicating cells. TK is responsible for catalyzing the phosphorylation of thymidine, which functions as a part of the pyrimidine salvage pathway involved in DNA synthesis. The activities of enzymes such as TK are essential for the activation of several chemotherapeutically important nucleoside analogues that are administered as prodrugs.

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

### **SPECIFICATION SUMMARY**

**Antigen:** 5'-His-tagged recombinant human thymidine kinase.

**Host Species:** Mouse

**Antibody Class:** IgG1

**Stabilizers:** None

**Preservatives:** None. Available on request.

### **SPECIFICITY**

This antibody specifically recognizes human thymidine kinase.

### **APPLICATIONS**

**Immunoblotting:** antibody at 10 ug/ml will recognize TK in 5, 10, or 20 ug lysates of cells that express TK.

**ELISA:** use antibody at 2-5 ug/ml (optimized for TK on solid phase at 10 ug/ml).

### **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 multiple freeze-thaw cycles.