

## MDC1 Monoclonal Antibody

### **ORDERING INFORMATION**

**Catalog No.:** 12596 (clone P2B11)  
**Size:** 100ug in PBS (1mg/ml), pH 7.4,  
50% glycerol, 0.09% sodium azide.  
Purified by Protein G affinity chroma-  
tography.

### **BACKGROUND**

Recent studies have shown that MDC1 (mediator of DNA damage checkpoint protein1) regulates many aspects of DNA damage response pathways, such as intra-S phase checkpoint, G<sub>2</sub>/M checkpoint, and radiation-induced apoptosis. Many proteins, such as ATM, BRCA1, and Chk2, interact with MDC1. MDC1 contains several protein-protein interaction domains. MDC1 appears to function as an adaptor protein, recruiting downstream proteins to upstream kinases and facilitating signal transduction following DNA damage.

### **SPECIFICATION SUMMARY**

**Antigen:** GST-tagged recombinant mouse MDC1 (accession no. NP\_001010833.2).

**Host Species:** Mouse

**Antibody Class:** IgG1

### **SPECIFICITY**

This antibody recognizes human, mouse, bovine and chimpanzee MDC1. Specific epitope is at the N-terminus of MDC1.

### **APPLICATIONS**

*Immunocytochemistry*

*Immunoblotting:* use at 1ug/ml. A band of ~184kDa is detected. Note: There are 4 isoforms of human MDC1 with molecular weights of approximately 227, 198, 196, and 117kDa.

**(For more information see Lou et al. 2003, Nature 421: 957-961)**

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

*Positive control:* 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 freeze-thaw cycles.

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