rev. 08/05

# **Calreticulin Monoclonal Antibody**

**CATALOG #**: 3076-100

**AMOUNT**: 100 μα

LOT #:

HOST: Mouse

IMMUNOGEN: Calreticulin-maltose binding fusion protein

**ISOTYPE**: IgG<sub>1</sub> kappa

CLONE: S75

MOL. WEIGHT: 63 KDa

SPECIES REACTIVITY: human, monkey

#### ANTIBODY FORMULATION:

100  $\mu g$  (200  $\mu g/ml)$  in PBS containing 1 mg/ml BSA and 1.5 mM sodium azide and 50% glycerol.

#### STORAGE CONDITIONS:

Store at -20°C. For long-term storage, aliquot and freeze at -70°C. Avoid repeated freeze/defrost cycles.

# **BACKGROUND DESCRIPTION:**

Calreticulin is a calcium binding protein found in abundance in the endoplasmic reticulum and the sarcoplasmic reticulum. Like many other ER proteins, it has the conserved ER retention KDEL (Lys-Asp-Glu-Leu) sequence at its C-terminus. Calreticulin has also been detected in the nucleus and nuclear envelop. Recent studies suggest that this soluble ER protein has a multifunctional role as it appears to be involved in calcium storage and regulation as well as having a molecular chaperone activity. Studies also suggest its involvement in certain autoimmune diseases. Consistence with its multiple functions the calreticulin molecule appears to have a zonal character. The protein has both high and low affinity calcium binding sites.

## **APPLICATIONS AND USAGE:**

Western blot analysis (0.5-1  $\mu$ g/ml), immunoprecipitation and Immunohistochemistry. However, the optimal conditions should be determined individually.

#### SPECIFICITY:

The antibody recognizes a 63 kDa calreticulin on SDS-PAGE immunoblots.

For Research Use Only! Not to be used in human.

#### RELATED PRODUCTS:

## Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

## Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

#### Cell Proliferation & Senescence

- · Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

## Cell Damage & Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

# Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

## Adipocyte & Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

## Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β-Galactosidase Staining Kit & Luciferase Reporter Assay Kit

## **Growth Factors and Cytokines**

Monoclonal and Polyclonal Antibodies