

# **PRODUCT DATA SHEET**

# Product: Anti-DR5 mAb, clone DR5-01

# Cat. No.: MC-897 (100 µg)

## Specificity:

Apoptosis, or programmed cell death, occurs during normal cellular differentiation and development of multicellular organisms. Apoptosis is induced by certain cytokines including Tumor Necrosis Factor (TNF) and Fas Ligand in the TNF family through their death domain containing receptors, TNF Receptor 1 (TNFR1) and Fas, respectively. Another member in the TNF family has been identified and designated TRAIL (TNF Related Apoptosis Inducing Ligand) and Apo2L (Apo2 Ligand). Receptors for TRAIL include two death domain containing receptors, DR4 and DR5, as well as two decoy receptors, DcR1 and DcR2, lacking the intracellular signaling death domain. DcR1 (TRID), like the related death receptors DR4 and DR5, contains two extracellular cysteine rich domains. However, DcR1 contains no intracellular death domain and is thus incapable of signaling apoptosis. It has been suggested that DcR1 is responsible for TRAIL resistance in normal human tissues including heart, placenta, lung, liver, kidney, spleen, and bone marrow. DR5 is a member of the TNF receptor superfamily, and contains an intracellular death This receptor can be activated by domain. Tumor Necrosis Factor related apoptosis including ligand (TNFSF10/TRAIL/APO2L), and tranduces apoptosis signal. Studies with FADD deficient mice suggested that FADD, a death domain containing adaptor protein, is required for the apoptosis mediated by this protein.

#### Immunogen:

Recombinant fusion protein of human IgG heavy chain and extracellular domain of DR5.

## Cellular Localization:

This antibody recognizes the extracellular domain of DR5.

#### Ig Isotype:

Mouse IgG<sub>1</sub>

#### Species Reactivity:

Human. Others not tested.

#### Format:

100  $\mu$ g of monoclonal antibody purified from hybridoma culture supernatant at approxiamtely 1 mg/mL in PBS containing 15 mM sodium azide, pH 7.4.

#### Storage:

Store at 4°C short term, -20°C long term. Aliquot to avoid freeze/thaw cycles.

#### **Applications:**

Flow cytometry

The optimal dilution for a specific application should be determined by the researcher.

#### Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

#### Warranty:

No warranties, expressed or implied, are made regarding the use of this product. **KAMIYA BIOMEDICAL COMPANY** is not liable for any damage, personal injury, or economic loss caused by this product.