

# **PRODUCT DATA SHEET**

# Product: TRAIL-R2, Human Recombinant Protein

# Cat. No.: TR-005 (50 µg)

#### Synonyms:

DR5, KILLER, TNFRSF 10B, CD262

# **Chemical Name:**

Recombinant human TRAIL-R2:Fc

#### Recombinant Protein:

The extracellular domain (amino acids 52-212) of human TRAIL-R2 fused to the Fc portion of human IgG1. ~46 kDa (SDS-PAGE). Produced in HEK 293 cells.

#### Background:

TRAIL receptors are members of the TNF family of proteins. TRAIL-R2 (DR5) is a 50 kDa transmembrane protein containing 2 cysteinerich repeats in the extracellular portion and a cytoplasmic motif called a 'death domain' (DD). Binding of TRAIL (APO-2L) to TRAIL-R2 can induce apoptosis. Other identified TRAIL receptors include TRAIL-R1 (DR4), which like TRAIL-R2 promotes apoptosis, and three receptors (TRAIL-R3, TRAIL-R4, and Osteoprotegerin) that are inhibitory.

#### Format:

50  $\mu$ g lyophilized, purified protein. Dissolve in 50  $\mu$ L sterile water to obtain a 1 mg/mL solution in PBS. Further dilutions should be made with medium containing 5% fetal calf serum or a carrier protein.

# Endotoxin Content:

< 0.1 EU/µg purified protein (LAL).

#### **Purity:**

≥ 95% as determined by SDS-PAGE.

# Specificity:

Binds human and mouse TRAIL. Other species not tested.

# **Biological Activity:**

Inhibits soluble TRAIL-induced apoptosis in a concentration range of 0.5-10  $\mu$ g/mL. Concentrations of rhTRAIL-R2:Fc required to inhibit may vary depending on the cell type studied and on the concentration of sTRAIL used to kill cells.

#### Applications and Suggested Dilutions:

ELISA: Use at 1 µg/mL. (capture) The optimal dilution for a specific application should be determined by the researcher.

#### Storage and Stability:

Store unreconstituted product at -20°C. Stable at least 6 months after receipt when stored at -20°C. Avoid repeated freeze/thaw cycles. After reconstitution, aliquot and store at -20°C.

#### **References:**

- Schneider, P. *et al.* (1997) Characterization of two receptors for TRAIL. *FEBS Lett.* <u>416</u>: 329-324.
- 2. Schneider, P. *et al.* (1997) TRAIL-receptors 1 (DR4) and 2 (DR5) signal FADD-dependent apoptosis and activate NF-kB. *Immunity* <u>7</u>: 831-836.

#### 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.