



## ***DB040: TRAIL (C13)***

### **Background:**

Several members of the growing TNF superfamily can regulate the elimination of immune cells by inducing apoptosis (1). TRAIL (TNF-related apoptosis-inducing ligand) or APO-2L is a member of the TNF superfamily that induces apoptosis by activating the death receptors DR4 and DR5 (2,3). TRAIL is attracting great interest as an anti-cancer agent because it can induce apoptosis in a broad range of tumor cells, but only rarely in non-transformed cells, and independently of p53 status (2&4). For a time it was unclear how TRAIL could induce apoptosis in tumor cells but not in non-transformed cells, while both of the cell types expressed the DR4 and DR5 death receptors. The discovery that DcR1 or TRID are mostly expressed on normal cells but not in most cancer cell lines helped to solve the puzzle, because these proteins act as decoys for the TRAIL protein (5).

### **Origin:**

TRAIL (C13) is provided as an affinity purified rabbit polyclonal antibody, raised against a peptide mapping to the carboxy terminus of human TRAIL.

### **Product Details:**

Each vial contains 200 µg/ml of affinity purified rabbit IgG TRAIL (C13)DB040, in 1 ml PBS containing 0.1 % sodium azide and 0.2% gelatin.

### **Competition Studies:**

A blocking peptide is also available, *DB040P*, for use in competition studies. Each vial contains 100 µg of peptide in 0.5 ml PBS with 0.1% sodium azide and 100 µg BSA.

### **Specificity:**

TRAIL (C13)DB040 reacts with TRAIL and of mouse, rat, and human origin by western blotting. Western blotting starting dilution 1:200.

### **Storage:**

Store this product at 4° C, do not freeze. The product is stable for one year from the date of shipment.

### **References:**

1. Pitti R. M., Marsters S.A., Siegfried R., Donahue C.J., Moore A., Ashkenazi A. 1996. Induction of Apoptosis by Apo-2 ligand, a New Member of the Tumor Necrosis Factor Cytokine Family. *JBC* 271(22):12687-12690.
2. Wajant H., Pfizenmaier K., Scheurich P. 2002. TNF-related apoptosis inducing ligand (TRAIL) and its receptors in tumor surveillance and cancer therapy. *Apoptosis* 7(5):449-459.
3. Phillips T.A., Ni J., Pan G., Ruben S.M., Wei Y., Pace J.L., Hunt J.S. 1999. TRAIL (Apo-2L) and TRAIL Receptors in Human Placentas: Implications for Immune Privilege. *Journal of Imm* 162:6053-6059.
4. Nagane M., Huang H.J., Cavenee W.K. 2001. The potential of TRAIL for cancer chemotherapy. *Apoptosis* 6(3):191-197.
5. Gura T. 1997. How TRAIL Kills Cancer Cells, But not Normal Cells. *Science* 277(8):768.