



Recombinant Canine TNF RII

Catalog Number: GR104221

Background

A tumor necrosis factor receptor (TNFR), or death receptor, is a trimeric^[2] cytokine receptor that binds tumor necrosis factors (TNF).^[1] The receptor cooperates with an adaptor protein (such as TRADD, TRAF, RIP), which is important in determining the outcome of the response (e.g. apoptosis, inflammation). Because "TNF" is often used to describe TNF alpha, "TNFR" is often used to describe the receptors that bind to TNF alpha - namely, CD120. However, there are several other members of this family that bind to the other TNFs.^{[3][4]} While all cell types studied express TNF RI, TNF RII expression is limited primarily to hematopoietic cells and cells of the immune system. Most of the biological function of TNF are mediated via TNF RI. Soluble forms of both TNF RI and TNF RII, generated as a result of proteolytic cleavage of the extracellular domain, have been detected in vivo in various fluids. The soluble TNF receptors can bind TNF with high affinity and function as TNF-antagonists.^[3, 5-7]

Reference

1. Banner DW, D'Arcy A, Janes W et al. (May 1993). *Cell* **73** (3): 431–45.
2. Ashkenazi, A.; Dixit, VM (1998). *Science* **281** (5381): 1305–8.
3. Locksley RM, Killeen N, Lenardo MJ (2001). *Cell* **104** (4): 487–501.
4. Hehlhans T, Pfeffer K (2005). *Immunology* **115** (1): 1–20.
5. Chen G & DV Goeddel (2002) *Science* 296: 1634.
6. MacEwan DJ (2002) *Cell Signal* 14: 477.
7. Feldmann M & RN Maini (2001) *Annu. Rev. Immunol.* 19:163.

DECLARATION

THIS REAGENT IS FOR IN VITRO LABORATORY TESTING AND RESEARCH USE ONLY. DO NOT USE IT FOR CLINICAL DIAGNOSTICS. DO NOT USE OR INJECT IT IN HUMANS AND ANIMALS.

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Description

Sources: expressed in *E. coli*.

Molecular weight: 20 kDa (aa 24-206).

Activity: Measured by its ability to inhibit TNF- α mediated cytotoxicity in the L-929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. Matthews N and Neale ML (1987) in Lymphokines and Interferons, A practical Approach. Clemens MJ et al. (eds): IRL Press. 221.

The ED50 for this effect is 0.2-0.6 $\mu\text{g/ml}$ in the presence of 0.25 ng/ml of rhTNF- α .

Endotoxin level: <1.0 EU per 1 μg of the protein by the LAL method.

Purity: > 95%, by SDS-PAGE under reducing conditions and visualized by silver staining.

Formulation: Lyophilized from a 0.2 μm filtered solution in PBS with BSA as a carrier protein.

Reconstitution: reconstitute at 50 $\mu\text{g/ml}$ in sterile PBS and store at -20°C .

Shipping and storage: The product is shipped at ambient temperature or with ice pad. Upon receipt, store it immediately at -20°C to avoid loss of activity and use it in 3 months.

Related products

1. GR238016 50 ml Reagent Reservoir, 100/case, 5 packs/case (pack of 20)
2. GR238004 Tissue Culture 96-well Microplate, individually packed, Case of 50
3. GR238019 1.5 ml Microcentrifuge tube with screw cap and free-standing, pack of 500
4. GR238007 125 ml leak-resistant HDPE bottle, colorless, pack of 24
5. GR238002 Microplate 12x8-Well Strip High Binding, Case of 50
6. GR238003 Microplate 12x8-Well Strip Medium Binding, Case of 50
7. GR238032 42592 Costar Stripwell Microplate 1 x 8 Flat Bottom, High Binding, Case of 100
8. GR238001 468667 Thermo Microplate 12x8-Well Strip Nunc Maxisorp F8, Case of 60
9. GR238031 96-well microplate sealer plastic, pack of 100