

## Product datasheet for **CL044PS**

### **Tnfrsf1a Rat Monoclonal Antibody [Clone ID: HM104]**

#### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	HM104
Applications:	ELISA, FC, IHC, IP
Recommended Dilution:	<b>Flow Cytometry</b> (1/50). <b>Immunoassays.</b> <b>Immunoprecipitation.</b> <b>Immunohistochemistry on Frozen Sections</b> (1/50).
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Specificity:	The monoclonal antibody recognizes the extracellular part of the Tumor Necrosis Factor Receptor type I (TNF-RI) of the membrane-bound as well as the soluble receptor.
Formulation:	PBS State: Purified State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% BSA Preservative: 0.02% Sodium Azide
Concentration:	lot specific
Purification:	Protein G Chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C. <b>DO NOT FREEZE!</b>
Stability:	Shelf life: one year from despatch.
Gene Name:	tumor necrosis factor receptor superfamily, member 1a
Database Link:	<a href="#">Entrez Gene 21937 Mouse P25118</a>



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**Background:**

TNF-RI (~55-60 kDa) is present on most cell types and is considered to play a prominent role in cell stimulation by TNF-alpha. TNF-alpha activates inflammatory responses, induces apoptosis, regulates cellular proliferation, and may even promote cancer progression. The effects of TNF-alpha are mediated by TNF-RI and TNF-RII, which have both distinct and overlapping downstream signaling cascades. Induction of cytotoxicity and other functions are mediated largely via TNF-RI. TNF-RI is equally well activated by both the 17 kDa soluble and 26 kDa membrane-bound form, whereas TNF-RII is efficiently activated only by the membrane bound form of TNF-alpha. TNF-RI signaling is initiated when trimeric TNF-alpha binds TNF-RI receptors. Subsequent TNF-RI trimerization promotes the recruitment of a proximal signaling complex composed of TNF Receptor Associated protein with a Death Domain (TRADD), Receptor Interacting Protein (RIP), cellular Inhibitor of Apoptosis Protein 1 (cIAP1), TNF Receptor Associated Factor 2 (TRAF2), and likely TRAF5. Studies with TNF-RI-deficient mice indicate that TNF-RI mediates most of the proliferation, pro-inflammatory, and apoptosis-activating pathways.

**Synonyms:**

Tumor necrosis factor receptor 1, TNF-R1, TNF-RI, TNFR-I, p55, p60, Tnfrsf1a