

#3736 Store at -20C

TNF-R1 (C25C1) Rabbit mAb



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, W-S, IP	H	Endogenous	55	Rabbit IgG	#P19438	7132

Product Usage Information

Application

Western Blotting
Simple Western™
Immunoprecipitation

Dilution

1:1000
1:10 - 1:50
1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity / Sensitivity

TNF-R1 (C25C1) Rabbit mAb recognizes endogenous levels of human TNF-R1 protein. This antibody does not appear to cross-react with other related family members. This antibody may recognize a 30 kDa splice isoform of TNF-R1 in some cell lines.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues within the intracellular region and surrounding Ser331 of human TNF-R1 protein.

Background

TNF-α is an important cytokine produced by numerous cell types, including neutrophils, activated lymphocytes, macrophages, and NK cells. It plays a critical role in inflammatory responses and apoptosis (1). TNF-α exists as a membrane-anchored and soluble form, both of which show biological activity. Response to TNF-α is mediated through two receptors, TNF-R1, which is widely expressed, and TNF-R2, which is expressed mainly in immune and endothelial cells (2). Antagonists to TNF-α have been validated as therapeutic targets for rheumatoid arthritis and other immune disorders (3).

The two receptors for TNF-α, TNF-R1 (55 kDa) and TNF-R2 (75 kDa) can mediate distinct cellular responses (4,5). In most cases cytotoxicity elicited by TNF has been reported to act through TNF-R1 (6,7). Cytotoxicity is mediated by a "death domain" with the intracellular region of the receptor that binds to the death domain adaptor protein TRADD and triggers the activation of caspases (8). Soluble forms of both receptors have also been characterized which can bind TNF-α and may play an important role in immune disorders (9,10).

Background References

- Aggarwal, B.B. (2003) *Nat Rev Immunol* 3, 745-56.
- Locksley, R.M. et al. (2001) *Cell* 104, 487-501.
- Taylor, P.C. et al. (2004) *Curr Opin Biotechnol* 15, 557-63.
- Tartaglia, L.A. et al. (1991) *Proc Natl Acad Sci USA* 88, 9292-6.
- Peschon, J.J. et al. (1998) *J Immunol* 160, 943-52.
- Tartaglia, L.A. et al. (1993) *Cell* 73, 213-6.
- Rothe, J. et al. (1993) *Nature* 364, 798-802.
- Chen, G. and Goeddel, D.V. (2002) *Science* 296, 1634-5.
- Humbert, M. et al. (1994) *Am J Respir Crit Care Med* 149, 1681-5.
- Schröder, J. et al. *Infection* 23, 143-8.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **W-S:** Simple Western™ **IP:** Immunoprecipitation

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.
U.S. Patent No. 7,429,487, foreign equivalents, and child patents deriving therefrom.
All other trademarks are the property of their respective owners. Visit [cellsignal.com/trademarks](https://www.cellsignal.com/trademarks) for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.