

**DATASHEET**

**TNF alpha Rabbit Polyclonal Antibody**

CAT. NO. APA07648

**KEY FEATURES**

|               |   |               |                    |
|---------------|---|---------------|--------------------|
| Target        | TNF alpha   | Source / Host | Rabbit             |
| Reactivity    | Human, Mouse, Rat, Monkey, Pig  | Clonality     | Polyclonal         |
| Applications  | WB, IHC, IF/ICC   | Conjugation   | Unconjugated       |
| Form / Buffer | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |               | Storage<br>at-20°C |

**BACKGROUND**

Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFB. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin-1 secretion and is implicated in the induction of cachexia, Under certain conditions it can stimulate cell proliferation and induce cell differentiation. Impairs regulatory T-cells (Treg) function in individuals with rheumatoid arthritis via FOXP3 dephosphorylation. Up-regulates the expression of protein phosphatase 1 (PP1), which dephosphorylates the key 'Ser-418' residue of FOXP3, thereby inactivating FOXP3 and rendering Treg cells functionally defective function in individuals with rheumatoid arthritis via FOXP3 dephosphorylation.

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

|        |                |
|--------|----------------|
| WB     | 1:500 - 1:1000 |
| IHC    | 1:50 - 1:200   |
| IF/ICC | 1:50 - 1:200   |

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

|                   |  |
|-------------------|--|
| Description       | Rabbit polyclonal antibody to TNF alpha  |
| Specificity       | Recognizes endogenous levels of TNF alpha protein.   |
| Antibody Type     | Primary antibody   |
| Immunogen         | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human TNF alpha. The exact sequence is proprietary. |
| Purification      | The antibody was purified by immunogen affinity chromatography.  |
| Molecular Weight  | Predicted: 25 kD; Observed: 26; 17 kD  |
| Form/Buffer       | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.                                |
| Alternative Names | TNFA; TNFSF2; Tumor necrosis factor; Cachectin; TNF-alpha; Tumor necrosis factor ligand superfamily member 2; TNF-a                      |
| Gene Symbol       | TNF  |
| Entrez Gene       | 7124(Human); 21926(Mouse); 24835(Rat)  |
| SwissProt         | P01375(Human); P06804(Mouse); P16599(Rat)  |

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arex.bio](mailto:info@arex.bio) or your local distributor.

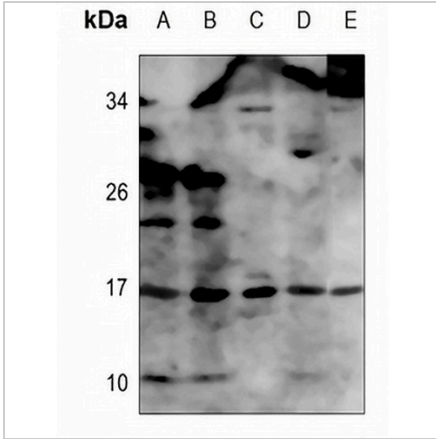
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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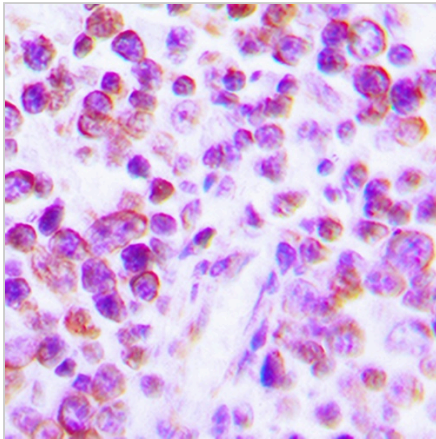
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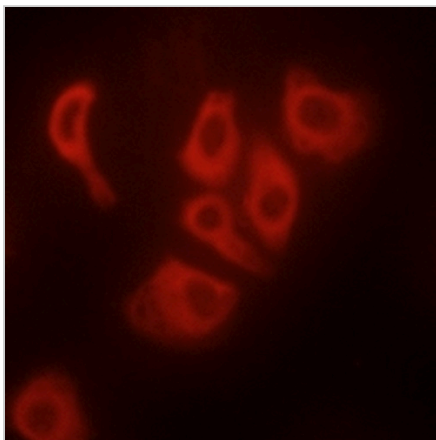
**DATA**



Western blot analysis of TNF alpha expression in HEK293T (A), HeLa (B), mouse lung (C), mouse kidney (D), mouse spleen (E) whole cell lysates. (Predicted band size: 25 kD; Observed band size: 26; 17 kD)



Immunohistochemical analysis of TNF alpha staining in human tonsil formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of TNF alpha staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a AREX® Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.