

# Product Information

## Anti-Human TNF- $\alpha$ Protein A scaffold

Cat. No.: **AFB-37LY**

This product is for research use only and is not intended for diagnostic use.

### Product Overview

The Anti-TNF- $\alpha$  Protein A Scaffold molecule was selected against human TNF- $\alpha$ . The Anti-TNF- $\alpha$  Protein A Scaffold molecule is an ideal affinity ligand as a capture reagent in ELISA and as detection reagent in dot blot. The Anti-TNF- $\alpha$  Protein A Scaffold molecule is modified with a unique C-terminal cysteine for directed single-point chemical modification, facilitating labeling with fluorescent dyes, biotin or coupling to matrices.

### Antigen Description

Human TNF- $\alpha$  (Tumour Necrosis Factor- $\alpha$ ) is a nonglycosylated protein of 17 kD belonging to the TNF superfamily of cytokines. TNF- $\alpha$  is produced by activated macrophages and T lymphocyte and forms trimers spontaneously. TNF- $\alpha$  shows a wide spectrum of biological activities that are mediated by binding to TNFRI and TNFRII receptors. Besides causing cytolysis and cytostasis of many tumour cell lines in vitro, TNF- $\alpha$  has an important role in host defences against pathogens. However, excess TNF- $\alpha$  seen in sepsis and diseases of autoimmune character, has severe pathological consequences and the neutralisation of TNF- $\alpha$  has been a successful treatment procedure for rheumatoid arthritis.

### Specific Activity

Anti-TNF- $\alpha$  Protein A scaffold molecule binds to human cytokine tumor necrosis factor  $\alpha$ , TNF- $\alpha$ . Cross reactivity with other species has not been tested.

### Source

Display library

### Species Reactivity

human

### Expression Host

E. coli

### Applications

Suitable as capture reagent in ELISA and as detection reagent in dot blot.

### Molecular Weight

13.7 kDa

### Storage

At +4°C is recommended for lyophilized protein. For reconstituted protein in physiological buffer, short-term storage at +4°C is recommended. For long-term storage, the protein solution should be aliquoted and then stored at -20°C. There is no decrease in

## ANTIGEN GENE INFORMATION

### Gene Name

[TNF tumor necrosis factor \[ Homo sapiens \]](#)

### Official Symbol

TNF

### Synonyms

DIF; TNFA; TNFSF2; TNF-alpha; tumor necrosis factor; APC1 protein; Cachectin; tumor necrosis factor-alpha; TNF, macrophage-derived; Differentiation inducing factor; Macrophage cytotoxic factor; MCF; Necrosin; TNFalpha; TNF Monocyte Derived; TNF Superfamily Member 2; TNF superfamily, member 2; TNF, monocyte derived; TNFA; Tumor necrosis factor alpha; Tumor necrosis factor ligand superfamily member 2; Tumor Necrosis Factor Precursor; Tumor necrosis factor, soluble form; Tumour Necrosis Factor Alpha

### Gene ID

[7124](#)

### mRNA Refseq

[NM\\_000594.2](#)

### Protein Refseq

[NP\\_000585.2](#)

### MIM

[191160](#)

### UniProt ID

P01375

### Chromosome Location

6p21.3

### Pathway

Adipocytokine signaling pathway; Adipogenesis; African trypanosomiasis; Allograft rejection; Alzheimer"s disease; Amoebiasis; Amyotrophic lateral sclerosis (ALS);

### Function

cytokine activity; identical protein binding; protease binding; protein binding; transcription regulatory region DNA binding; tumor necrosis factor receptor binding