

# IO Test Conjugated Antibody

## Anti-TNF $\alpha$ -Alexa Fluor 700

	Specifications
Specificity	Anti-TNF $\alpha$
Clone	IPM2 (188)
Hybridoma	ND
Immunogen	ND
Isotype	IgG1
Species	Mouse
Purification	ND
Fluorochrome	Alexa Fluor 700
Molar ratio	Alexa Fluor 700 / Ig: 1.72 - 2.85
$\lambda$ excitation	695 nm
Emission Peak	720 nm
Buffer	PBS pH 7.2 plus 2 mg / mL BSA and 0.1% NaN <sub>3</sub>

**REF** B76295 Liquid - 0.5 mL

### Analyte Specific Reagent.

Analytical and performance characteristics are not established

### REAGENTS

Concentration: See lot specific Certificate of Analysis at [www.beckmancoulter.com](http://www.beckmancoulter.com).

### WARNING AND PRECAUTIONS

1. This reagent contains 0.1% sodium azide. Sodium azide under acid conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions can develop. If skin or eye contact occurs, wash excessively with water.
2. Specimens, samples and all material coming in contact with them should be considered potentially infectious and disposed of with proper precautions.
3. Never pipet by mouth and avoid contact of samples with skin and mucous membranes.
4. Do not use antibody beyond the expiration date on the label.
5. Do not expose reagents to strong light during storage or incubation.
6. Avoid microbial contamination of reagents or incorrect results might occur.
7. Use good laboratory practices when handling this reagent.
8. Any change in the physical appearance of the reagents may indicate deterioration and the reagent should not be used.

### GHS HAZARD CLASSIFICATION

Not classified as hazardous

### STORAGE AND HANDLING CONDITIONS AND STABILITY

This reagent is stable up to the expiration date when stored at 2 – 8°C. Do not freeze.

No reconstitution is necessary. This monoclonal antibody may be used directly from the vial. Bring reagent to 18 – 25°C prior to use.

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Sodium azide preservative may form explosive compounds in metal drain lines. See NIOSH Bulletin: Explosive Azide Hazard (8/16/76).

To avoid the possible build-up of azide compounds, flush wastepipes with water after the disposal of undiluted reagent. Sodium azide disposal must be in accordance with appropriate local regulations.

## **SPECIFICITY**

Tumor necrosis factor (TNF $\alpha$ ) or cachectin is a cytokine that was first identified based on its cytotoxic activity against various cell lines. Human TNF $\alpha$  is synthesized as a pro-protein with a molecular weight of 26 kDa (membrane-bound form). The pro-protein is cleaved by a specific metalloprotease (TACE) yielding a monomeric, soluble form of 17 kDa (1). Under physiological conditions, TNF $\alpha$  forms a homotrimeric protein (1,2).

This cytokine is primarily produced by mononuclear phagocytes, and by activated lymphocytes. Immunostaining allows intracellular detection of TNF $\alpha$  before it can be detected by a bioassay (3). TNF $\alpha$  acts on target cells by binding to two types of receptors, the TNF $\alpha$  receptor I (TNF-RI or CD120a) and the TNF $\alpha$  receptor II (TNF-RII or CD120b) (4). TNF $\alpha$  elicits a wide spectrum of immune and inflammatory responses, including the induction of other cytokines and immunoregulatory molecules, cell growth and differentiation and apoptosis (5,6). This molecule is also involved in Th1 – Th2 (T helper 1 – T helper 2) cytokine pathways (or Type 1 – Type 2 responses), as a Th1-effector cytokine (3,7,8). The monoclonal antibody 188 specifically reacts with TNF $\alpha$  (9,10).

## **TRADEMARKS**

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Alexa Fluor is a trademark of Molecular Probes, Inc.

## **ADDITIONAL INFORMATION**

For additional information, or if damaged product is received, call Beckman Coulter Customer Service at 800-526-7694 (USA or Canada) or contact your local Beckman Coulter Representative.

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## **REFERENCES**

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