

Datasheet: PHP051A

Description:	RECOMBINANT HUMAN TNF ALPHA
Name:	TNF ALPHA
Format:	Rec. Protein
Product Type:	Recombinant Protein
Quantity:	10 µg

Product Details

Applications This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.abdserotec.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
ELISA	■			0.2 - 0.4ng/well
Western Blotting	■			1.5 - 3.0ng/lane
Functional Assays	■			0.05ng/ml - 20ng/ml

Where this protein has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the protein for use in their own system using appropriate positive/negative controls.

Target Species	Human
Species Cross Reactivity	Reacts with: Bovine, Mouse N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified recombinant cytokine - lyophilised
Reconstitution	Reconstitute with 0.1 ml distilled water Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. AbD Serotec recommend that the vial is gently mixed after reconstitution. For long term storage the addition of 0.09% sodium azide is recommended. N.B. For functional studies do not add sodium azide
Buffer Solution	TRIS buffered saline
Preservative Stabilisers	None present
Endotoxin Level	<0.1ng/ug
Approx. Protein Concentrations	Total protein concentration 0.1 mg/ml after reconstitution
External Database Links	UniProt: P01375 Related reagents Entrez Gene: 7124 TNF Related reagents
Synonyms	TNFA, TNFSF2
Product Information	PHP051A is an <i>E. coli</i> -derived recombinant protein corresponding to the C-terminal domain of human tumour

necrosis factor alpha (TNF α), a pro-inflammatory cytokine with cytotoxic effects on various tumour cells.

Protein Molecular Weight	17.4 kDa based on 157 amino acid sequence
Activity	PHP051A has a specific activity of $>2 \times 10^7$ units/mg as determined by cytolysis of L929 cells in the presence of Actinomycin D.
Purity	$>98\%$ by SDS PAGE and HPLC analysis
ELISA	This product may be used as a standard in ELISA with either AHP1212 or AHP1212B .
Western Blotting	This product may be used as the positive control in Western Blotting applications with either AHP1212 or AHP1212B .
References	<ol style="list-style-type: none">1. Cernuda-Morollon, E. <i>et al.</i> (2001) 15-Deoxy-Delta 12,14-prostaglandin J2 inhibition of NF-kappaB-DNA binding through covalent modification of the p50 subunit. J. Biol.Chem. 276 (38): 35530 - 355362. Taubert, A. & Hermosilla, C. (2008) Bovine recombinant IFNγ induces endothelial cell gene transcription of immunoregulatory molecules and upregulates PMN and PBMC adhesion on bovine endothelial cells. Vet Res Commun. 32: 35-47.3. Demfalk, J. <i>et al.</i> (2004) Commercially available antibodies to human tumour necrosis factor-alpha tested for cross-reactivity with ovine and bovine tumour necrosis factor-alpha using flow cytometric assays. Acta Vet Scand. 45: 99-107.4. Taubert, A. <i>et al.</i> (2007) Eimeria bovis infection enhances adhesion of peripheral blood mononuclear cells to and their transmigration through an infected bovine endothelial cell monolayer in vitro. Parasitol Res. 101: 591-8.
Storage	<p>Prior to reconstitution store at $+4^{\circ}\text{C}$. Following reconstitution store at -20°C.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the protein. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Shelf Life	3 months from date of reconstitution
Health And Safety Information	Material Safety Datasheet Documentation #10169 available at: http://www.abdserotec.com/uploads/MSDS/10169.pdf
Regulatory	For research purposes only

North & South America Tel: +1 800 265 7376
Fax: +1 919 878 3751
Email: sales.us@abdserotec.com

Worldwide

Tel: +44 1865 852 700
Fax: +44 1865 852 739
Email: sales@abdserotec.com

Europe

Tel: 00800 2255 4223
Fax: 00800 2329 2223
Email: sales.eu@abdserotec.com

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