

## Datasheet: PHP051

<b>Description:</b>	RECOMBINANT HUMAN TNF ALPHA
<b>Name:</b>	TNF ALPHA
<b>Format:</b>	Rec. Protein
<b>Product Type:</b>	Recombinant Protein
<b>Quantity:</b>	50 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](http://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	■			0.05 - 20.0ng/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.

<b>Target Species</b>	Human
<b>Species Cross Reactivity</b>	Reacts with: Bovine, Mouse <b>N.B.</b> Antibody reactivity and working conditions may vary between species.
<b>Product Form</b>	Purified recombinant cytokine - lyophilised
<b>Reconstitution</b>	Reconstitute with 0.5 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. <b>N.B.</b> For functional studies do not add sodium azide
<b>Buffer Solution</b>	TRIS buffered saline
<b>Preservative Stabilisers</b>	None present
<b>Endotoxin Level</b>	<0.1ng/ug
<b>Approx. Protein Concentrations</b>	Total protein concentration 0.1 mg/ml after reconstitution
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P01375</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">7124</a> TNF <a href="#">Related reagents</a>
<b>Synonyms</b>	TNFA, TNFSF2
<b>Product Information</b>	PHP051 is an <i>E. coli</i> -derived recombinant protein corresponding to the C-terminal 157 amino acids of human Tumour

Necrosis Factor Alpha (TNFa), a cytokine which exerts cytotoxic effects on a wide range of tumour cells.

PHP051 has an ED<sub>50</sub> of <0.05 ng/ml as determined by an assay measuring cytolysis of L929 cells in the presence of Actinomycin D.

<b>Protein Molecular Weight</b>	17.4kD (157 Amino acid sequence)
<b>Purity</b>	>98% by SDS PAGE and HPLC analysis
<b>ELISA</b>	PHP051 may be used as a standard in a sandwich ELISA with <a href="#">AHP1212</a> as the capture reagent and <a href="#">AHP1212B</a> as the detection reagent.
<b>Western Blotting</b>	PHP051 may be used as a positive control in western blotting for either <a href="#">AHP1212</a> or <a href="#">AHP1212B</a>
<b>References</b>	<ol style="list-style-type: none"><li>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. <a href="#">J. Biol.Chem. 276 (38): 35530 - 35536</a></li><li>2. Taubert, A. &amp; Hermosilla, C. (2008) Bovine recombinant IFNgamma induces endothelial cell gene transcription of immunoregulatory molecules and upregulates PMN and PBMC adhesion on bovine endothelial cells. <a href="#">Vet Res Commun. 32: 35-47.</a></li><li>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. <a href="#">Acta Vet Scand. 45: 99-107.</a></li><li>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. <a href="#">Parasitol Res. 101: 591-8.</a></li></ol>
<b>Storage</b>	<p>Prior to reconstitution store at +4°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>
<b>Shelf Life</b>	3 months from date of reconstitution
<b>Health And Safety Information</b>	Material Safety Datasheet Documentation #10169 available at: <a href="http://www.abdserotec.com/uploads/MSDS/10169.pdf">http://www.abdserotec.com/uploads/MSDS/10169.pdf</a>
<b>Regulatory</b>	For research purposes only

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