



# TNF Monoclonal Antibody

<b>Product Code</b>	CSB-MA084771A0m
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Immunogen</b>	Recombinant Bovine TNF alpha protein
<b>Raised In</b>	mouse
<b>Species Reactivity</b>	Bovine
<b>Tested Applications</b>	ELISA
<b>Relevance</b>	<p>Tumor necrosis factor alpha (TNF<math>\alpha</math>, also known as cachectin and TNFSF1A, is the prototypic ligand of the TNF superfamily. It is a pleiotropic molecule that plays a central role in inflammation, apoptosis, and immune system development. TNF<math>\alpha</math> is produced by a wide variety of immune and epithelial cell types. Bovine TNF<math>\alpha</math> consists of a 35 amino acid (aa) cytoplasmic domain, a 21 aa transmembrane segment, and a 178 aa extracellular domain (ECD). Within the ECD, bovine TNF<math>\alpha</math> shares 64%-83% sequence identity with canine, cotton rat, equine, feline, human, mouse, porcine, rat, and rhesus TNF<math>\alpha</math>. The 26 kDa type 2 transmembrane protein is assembled intracellularly to form a noncovalently linked homotrimer. Ligation of this complex induces reverse signaling that promotes lymphocyte costimulation but diminishes monocyte responsiveness. Cleavage of membrane bound TNF<math>\alpha</math> by TACE/ADAM17 releases a 55 kDa soluble trimeric form of TNF<math>\alpha</math>. TNF<math>\alpha</math> trimers bind the ubiquitous TNF RI and the hematopoietic cell restricted TNF RII, both of which are also expressed as homotrimers. TNF<math>\alpha</math> regulates lymphoid tissue development through control of apoptosis. It also promotes inflammatory responses by inducing the activation of vascular endothelial cells and macrophages. TNF<math>\alpha</math> is a key cytokine in several inflammatory disorders. It contributes to the development of type 2 diabetes through its effects on insulin resistance and fatty acid metabolism.</p>
<b>Form</b>	liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
<b>Purification Method</b>	>95%, Protein G purified
<b>Isotype</b>	IgG2b
<b>Clonality</b>	monoclonal
<b>Alias</b>	Cachectin, TNF-alpha, Tumor necrosis factor ligand superfamily member 2
<b>Product Type</b>	Monoclonal Antibody
<b>Immunogen Species</b>	Bos taurus (Bovine)
<b>Clone No.</b>	2E1A5