

IVMB0206

Product Information

Product SKU:	IVMB0206	Clone:	D2E7	Target:	TNF alpha
Size:	500 µg			Isotype:	Human IgG1κ

Additional Information

Reactivity:	Human	Host Species:	Human
Antibody Type:	Biosimilar Recombinant Human Monoclonal Antibody	Expression Host:	HEK-293 Cells

Immunogen Information

Background: Adalimumab is a research-grade monoclonal antibody that works by inactivating tumor necrosis factor-alpha (TNF-α). TNF-α is a 17.5 kD protein that mediates inflammation and immunity caused by the invasion of viruses, bacteria, and parasites by initiating a cascade of cytokines that increase vascular permeability, thus bringing macrophages and neutrophils to the site of infection. TNF-α secreted by the macrophage causes the blood to clot which provides containment of the infection. TNF-α inactivation has proven to be important in downregulating the inflammatory reactions associated with autoimmune diseases such as rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, Crohn's disease, moderate to severe chronic psoriasis, and juvenile idiopathic arthritis. Adalimumab blocks the interaction with the p55 and p75 cell surface TNF receptors thus, neutralizing the biological function of TNF. Anti-Human TNF alpha (Adalimumab) utilizes the same variable regions from the therapeutic antibody Adalimumab making it ideal for research projects.

Endotoxin Level: < 1.0 EU/mg as determined by the LAL method

Applications: B

Synonyms: DIF; TNFA; TNFSF2; TNLG1F; TNF-alpha

Antigen Distribution: TNF-α is secreted by macrophages, monocytes, neutrophils, T cells, B cells, NK cells, LAK cells.

Immunogen:	Human TNF alpha
Formulation:	This biosimilar antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.
Specificity:	This non-therapeutic biosimilar antibody uses the same variable region sequence as the therapeutic antibody Adalimumab. Clone D2E7 binds to soluble TNF- α , but not to TNF- β (lymphotoxin). This product is for research use only.
Product Preparation:	Recombinant biosimilar antibodies are manufactured in an animal free facility using only in vitro protein free cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates.
Storage & Handling:	Functional grade preclinical antibodies may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at -80°C. Avoid Repeated Freeze Thaw Cycles.