Anti-Human TNF Adalimumab





Product Information

Product SKU: IVMB0203 Clone: D2E7 Target: TNF alpha

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- $\!\alpha$ 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- $\alpha\!$, 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 onlyin

vitroprotein 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.