Adalimumab Biosimilar, N297A Mutant | Catalog C003P.NA

Adalimumab Biosimilar, N297A Mutant. Adalimumab biosimilar CHO stable cell line is available for licensing to manufacture the adalimumab biosimilar protein. The research grade adalimumab biosimilar protein is for research use only (RUO). Recombinant human IgG1 isotype controls are available.

Product Specifications

Catalog No.	C003P.NA
Product Name	Adalimumab Biosimilar, N297A Mutant
Supplier Name	Syd Labs, Inc.
Brand Name	Syd Labs
Synonyms	Anti-TNF alpha Human Monoclonal Antibody
Summary	Recombinant Humanized IgG1 Monoclonal Antibody.
Isotype	Human IgG1 N297A Mutant
Source/Host	Produced in the adalimumab biosimilar CHO stable cell line.
Specificity	Specifically binds to human TNF alpha.

Properties & Storage

Applications	ELISA, neutralization, functional assays such as bioanalytical PK and ADA assays, and those assays for studying biological pathways affected by adalimumab.
Formulation	0.2 µM filtered solution, pH 5.2, no stabilizers or preservatives.
Endotoxin	< 1 EU per 1 mg of the protein by the LAL method.
Purity	>95% by SDS-PAGE under reducing conditions and HPLC.
Shipping	Shipped with ice pack. Store immediately at recommended temperature.
Storage	12 months from receipt at -20 to -70°C; 1 month at 2 to 8°C. Avoid freeze-thaw cycles.

Background & Description

Adalimumab, the first fully human monoclonal antibody drug approved by FDA, binds to TNFα, inactivates TNF receptors, and downregulates the inflammatory reactions associated with a variety of autoimmune diseases, such as rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, Crohn's disease, ulcerative colitis, moderate to severe chronic psoriasis and juvenile idiopathic arthritis.

Mainly produced by activated macrophages (M1), Tumor necrosis factor (TNF, cachexin, cachectin, tumor necrosis factor alpha, TNFα) plays important roles in the regulation of immune cells. As a member of a group of cytokines that stimulate the acute phase reaction, TNF is involved in systemic inflammation and able to induce fever, apoptotic cell death, cachexia, inflammation, and to inhibit tumorigenesis and viral replication and respond to sepsis via IL1 & IL6 producing cells. Dysregulation of TNF expression could have serious impact in a variety of human diseases including Alzheimer's disease, cancer, major depression and inflammatory bowel disease.