

## Humanized TNF $\alpha$ Monoclonal Antibody

SKU: EAB-056

**Humanized TNF $\alpha$**  monoclonal antibody (Clone ID: 3B12), expressed in Chinese Hamster Ovary cells (CHO), is capable of strong binding to human TNF $\alpha$ .

TNF $\alpha$  belongs to the TNF superfamily of cytokines and signals through its two receptors, TNFR1 and TNFR2 which can be activated by both the soluble trimeric and membrane-bound and forms of TNF $\alpha$ . TNF $\alpha$  is primarily produced by macrophages in response to foreign antigens such as bacteria (lipopolysaccharides), viruses, and parasites as well as mitogens and other cytokines but can also be expressed by monocytes, neutrophils, NK cells, CD4 T cells and some specialized dendritic cells. This TNF $\alpha$  monoclonal antibody is developed from phage display technologies from mouse synthetic scFv library (**SKU: ADL-07**). It is a humanized monoclonal antibody that binds specifically to human TNF $\alpha$ , and it can neutralize the bioactivity of human TNF $\alpha$ .

species reactivity	human
recombinant	expressed in Chinese Hamster Ovary cells (CHO).
applications	ELISA, WB, IHC, Flow Cyt, neutralization
antibody form	affinity purified immunoglobulin
immunogen	human TNF $\alpha$
clone	3B12
purity	>95% (SDS-PAGE)
form	0.015 M PBS, 0.05% NaN <sub>3</sub> , pH7.2
concentration	~ 2 mg/ml
isotype	human IgG1, k
Fc-engineered	n/a; wild type Fc

- Store at -20°C. Recombinant monoclonal antibodies are guaranteed stable for 12 months when properly stored.

### References:

1. Chen J, Liao J, Xiang L, Zhang S, Yan Y. Current knowledge of TNF- $\alpha$  monoclonal antibody infliximab in treating Kawasaki disease: a comprehensive review. *Front Immunol.* 2023, 14:1237670.
2. Thalayasingam N, Isaacs JD. Anti-TNF therapy. *Best Pract Res Clin Rheumatol.* 2011, 25(4):549-67.
3. Danese S, Fiorino G, Peyrin-Biroulet L. Positioning Therapies in Ulcerative Colitis. *Clin Gastroenterol Hepatol.* 2020, 18(6):1280-1290.
4. Berry M, Brightling C, Pavord I, Wardlaw A. TNF-alpha in asthma. *Curr Opin Pharmacol.* 2007, 7(3):279-282.