

Anti-Human CD137 monoclonal antibody

Product Name

Anti-Human CD137 monoclonal antibody

Size / Catalog Number

100µg / GMP-TL778-0100

Product Information

Expression system: HEK293 cells

Purity: > 90% as determined by SDS-PAGE and HPLC

Endotoxin: < 0.1 EU per 1 µg of protein (LAL method)

Activity: Determined by binding with PBMC

Purification: Protein A sepharose affinity

Form: Liquid

Storage Buffer: 20 mM Phosphate Buffer, pH7.4 (containing 150 mM NaCl).

Preservative: Human Serum Albumin

Background

This product is a humanized monoclonal antibody targeting human CD137 (4-1BB), recombinantly expressed in HEK-293 cells and purified via affinity chromatography, exhibiting low immunogenicity and high specificity. CD137, a member of the TNF receptor superfamily (TNFRSF), functions as a type I transmembrane glycoprotein predominantly expressed on activated T cells. Upon binding to its ligand 4-1BBL, it regulates T-cell activation, proliferation, and apoptosis, serving as a pivotal costimulatory molecule in T-cell-dependent immune responses. Rigorously validated under a quality control system encompassing sterility and endotoxin testing, the antibody is optimized for preclinical applications such as cell culture assays. Additionally, GMP-grade customization services are available to support cell-based therapy development, ensuring compliance with clinical-grade material requirements.

Stability & Storage

Stable for up to 24 months when stored at 2~8°C under sterile condition.

References

1. Langstein J, Schwarz H. Identification of CD137 as a potent monocyte survival factor. *J Leukoc Biol.* 1999 Jun;65(6):829-33.
2. Kim HH, Kwack K, Lee ZH. Activation of c-jun N-terminal kinase by 4-1BB (CD137), a T cell co-stimulatory molecule. *Mol Cells.* 2000 Jun 30;10(3):247-52.
3. Kienzle G, von Kempis J. CD137 (ILA/4-1BB), expressed by primary human monocytes, induces monocyte activation and apoptosis of B lymphocytes. *Int Immunol.* 2000 Jan;12(1):73-82.
4. Chu DT, Bac ND, Nguyen KH, *et al.* An Update on Anti-CD137 Antibodies in Immunotherapies for Cancer. *Int J Mol Sci.* 2019 Apr 12;20(8):1822.

Intended Use

For research and manufacturing purposes only.