

Human PD-L1 (Atezolizumab) Antibody

APC

Biosimilar Recombinant Human Monoclonal Antibody

Product Information

Product No.: LT1751
Clone: RG7446
Isotype: Human IgG
Storage: Sterile 2-8°C

Product Description

Specificity:

This non-therapeutic biosimilar antibody uses the same variable region sequence as the therapeutic antibody Atezolizumab. Atezolizumab recognizes an epitope on mouse PD-L1. This product is for research use only.

Antigen Distribution:

PD-L1 is present on T cells, B cells, NK cells, dendritic cells, IFN- γ activated endothelial cells, and monocytes.

Background:

PD-1 is a 50-55 kD member of the B7 Ig superfamily. PD-1 is also a member of the extended CD28/CTLA-4 family of T cell regulators and is suspected to play a role in lymphocyte clonal selection and peripheral tolerance. The ligands of PD-1 are PD-L1 and PD-L2, and are also members of the B7 Ig superfamily. PD-1 and its ligands negatively regulate immune responses. PD-L1, or B7-Homolog 1, is a 40 kD type I transmembrane protein that has been reported to costimulate T cell growth and cytokine production. The interaction of PD-1 with its ligand PD-L1 is critical in the inhibition of T cell responses that include T cell proliferation and cytokine production. PD-L1 has increased expression in several cancers. Inhibition of the interaction between PD-1 and PD-L1 can serve as an immune checkpoint blockade by improving T-cell responses in vitro and mediating preclinical antitumor activity. Within the field of checkpoint inhibition, combination therapy using anti-PD1 in conjunction with anti-CTLA4 has significant therapeutic potential for tumor treatments. PD-L2 is a 25 kD type I transmembrane ligand of PD-1. Via PD-1, PD-L2 can serve as a coinhibitor of T cell functions. Regulation of T cell responses, including enhanced T cell proliferation and cytokine production, can result from mAbs that block the PD-L2 and PD-1 interaction.

Known Reactivity Species:

Human

Expression Host:

HEK-293 Cells

Format:

Allophycocyanin (APC)

Immunogen:

Unknown

Formulation

This Allophycocyanin (APC) conjugate is formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.4, 1% BSA and 0.09% sodium azide as a preservative.

Storage and Stability

This Allophycocyanin (APC) conjugate is stable when stored at 2-8°C. **Do not freeze.**

Pathogen Testing

To protect mouse colonies from infection by pathogens and to assure that experimental preclinical data is not affected by such pathogens, all of Leinco's recombinant biosimilar antibodies are tested and guaranteed to be negative for all pathogens in the IDEXX IMPACT I Mouse Profile.

Applications

Applications and Recommended Usage (Quality Tested by Leinco):

FC The suggested concentration for Atezolizumab biosimilar antibody for staining cells in flow cytometry is $\leq 0.25 \mu\text{g}$ per 106 cells in a volume of 100 μl . Titration of the reagent is recommended for optimal performance for each application.

Other Applications Reported in Literature:

WB

Country of Origin

USA

References

1. Ardolino, M. et al. (2018) J Clin Invest. 128(10):4654-4668. PubMed
2. Schreiber, RD. et al. (2017) Cancer Immunol Res. 5(2):106-117.
3. Freeman, G. et al. (2000) J. Exp. Med. 192:1027.