Leinco Technologies, Inc.
excellence in early discovery research™

Human PD-L1 (Atezolizumab) Antibody

Fc Muted™

Biosimilar Recombinant Human Monoclonal Antibody

Product Information

Product No.: LT1755
Clone: RG7446
Isotype: Human IgG
Storage: Sterile 2° to 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:

Purified No Carrier Protein

Immunogen:

Unknown

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.

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Purity
≥95% by SDS Page, ≥95% monomer by analytical SEC

Endotoxin
< 1.0 EU/mg as determined by the LAL method

Storage and Stability
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 ≤ -70°C. **Avoid Repeated Freeze Thaw Cycles.**

Product Preparation
Recombinant biosimilar antibodies are manufactured in an animal free facility using only *in vitro* protein 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.

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 ≤ 0.25 µg per 10^6 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.