

# Anti-PD-L1 (Atezolizumab), humanized Antibody

Human Monoclonal Antibody Catalog # ABV12036

## **Product Information**

**Application** E

Primary Accession

Reactivity

Human

Host

Clonality

Isotype

Monoclonal

Human IgG1

Clone Names N/A
Calculated MW 33275

### **Additional Information**

**Gene ID** 29126

Other Names Tecentriq, PD-L1

Target/Specificity PD-L1

Antibody Form Liquid

**Appearance** Colorless liquid

**Formulation** In phosphate buffered saline, pH 7.4

**Handling** The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C

**Background Descriptions** 

**Precautions** Anti-PD-L1 (Atezolizumab), humanized Antibody is for research use only and

not for use in diagnostic or therapeutic procedures.

## **Protein Information**

Name CD274 ( <u>HGNC:17635</u>)

**Function** Plays a critical role in induction and maintenance of immune tolerance to

self (PubMed:<u>11015443</u>, PubMed:<u>28813410</u>, PubMed:<u>28813417</u>,

PubMed:31399419). As a ligand for the inhibitory receptor PDCD1/PD-1, modulates the activation threshold of T-cells and limits T-cell effector response (PubMed:11015443, PubMed:28813410, PubMed:28813417, PubMed:36727298). Through a yet unknown activating receptor, may

costimulate T-cell subsets that predominantly produce interleukin-10 (IL10) (PubMed:10581077). Can also act as a transcription coactivator: in response to hypoxia, translocates into the nucleus via its interaction with phosphorylated STAT3 and promotes transcription of GSDMC, leading to pyroptosis (PubMed:32929201).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Early endosome membrane; Single-pass type I membrane protein. Recycling endosome membrane; Single-pass type I membrane protein. Nucleus. Note=Associates with CMTM6 at recycling endosomes, where it is protected from being targeted for lysosomal degradation (PubMed:28813417). Translocates to the nucleus in response to hypoxia via its interaction with phosphorylated STAT3 (PubMed:32929201). [Isoform 2]: Endomembrane system; Single-pass type I membrane protein

#### **Tissue Location**

Highly expressed in the heart, skeletal muscle, placenta and lung. Weakly expressed in the thymus, spleen, kidney and liver. Expressed on activated T- and B-cells, dendritic cells, keratinocytes and monocytes.

# **Background**

Atezolizumab (Tecentriq) is a fully humanized, engineered monoclonal antibody of IgG1 isotype against the protein programmed cell death-ligand 1 (PD-L1). Atezolizumab blocks the interaction of PD-L1 with PD-1 and induces anti-tumor immune reactivation.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.