Data Sheet (Cat.No.T9902)

TargetMol

Atezolizumab

Chemical Properties

CAS No. : 1380723-44-3

Formula:

Molecular Weight: 144.6 kDa

Storage: Store at low temperature
-20°C for 1 year
Actual storage temperature shall be subject to the COA.

Atezolizumab

Biological Description

Description	Atezolizumab is an antibody inhibitor, a humanized monoclonal antibody, IgG1, which targets PD-L1 and blocks the interaction of PD-L1 with PD-1. Atezolizumab has antitumor activity and promotes T-cells to attack tumor cells.
Targets(IC50)	Apoptosis,PD-1/PD-L1,Autophagy
In vitro	**METHODS**: MDA-MB-231, BT-20, MDA-MB-468 cells and T cells were co-cultured and treated with Atezolizumab (50-100 μg/mL) for 4-24 h. T cell-mediated cytotoxicity assay was performed. **RESULTS**: Atezolizumab significantly enhanced T cell-mediated cytotoxicity of MDA-MB-231 cells in a dose-dependent manner, with 100 μg/mL concentration of Atezolizumab showing significant efficacy at 4 and 24 h incubation.Similar results were obtained with BT-20. No Atezolizumab-induced T cell-mediated cytotoxicity was observed in PD-L1- MDA-MB-468 cells compared to MDA-MB-231 and BT-20 cells. [1] **METHODS**: MDA-MB-231 cells were treated with Atezolizumab (0.5 μg/mL) for 24 h. Surface expression of PD-L1 was detected by flow cytometry. **RESULTS**: Almost all MDA-MB-231 cells were positive for PD-L1, but the detection of PD-L1 epitopes was blocked by the specific antibody Atezolizumab after 24 h treatment. [2]
In vivo	**METHODS**: To detect in vivo antitumor activity, Atezolizumab (10 mg/kg) and Bevacizumab (5 mg/kg) were intraperitoneally injected into BALB/C nude mice bearing A2780cis xenografts every two days for three weeks. **RESULTS**: In vivo treatment with Atezolizumab or Bevacizumab induced significant antitumor effects and significantly inhibited tumor growth. Dual blockade with Atezolizumab and Bevacizumab significantly inhibited tumor growth compared to each treatment. [3]
Cell Research	Objective: Determine the binding of [111In]PD-L1-mAb to tumor cell lines. Cells: NCI-H2444（Lung Cancer cell line）, MDAMB231（Breast Cancer cell line）,etc. Concentrations: 1 μCi/100μl. Incubation Time: 1 h. Method: Incubating 1 μCi of [111In] PD-L1-mAb with 1×106cells (in triplicate for each cell line) for 1h at 37°C. PD-L1 blocking was performed by adding a 10-fold molar equivalent excess of the non-labeled mAb. After incubation, cells were washed three times with cold PBS prior to counting on an automated gamma counter.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.0069 mL	0.0346 mL	0.0692 mL
5 mM	0.0014 mL	0.0069 mL	0.0138 mL
10 mM	0.0007 mL	0.0035 mL	0.0069 mL
50 mM	0.0001 mL	0.0007 mL	0.0014 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.