Atezolizumab Biosimilar, Human IgG1 L234A L235A P329G (LALAPG) Fc Silent Mutant, Endotoxin 0.05 EU/mg | C024P.hLA.05

Atezolizumab Biosimilar, Human IgG1 L234A L235A P329G (LALAPG) Fc Silent Mutant, Endotoxin 0.05 EU/mg. The research grade Atezolizumab biosimilar protein is for research use only (RUO). Recombinant human IgG1 isotype controls are available. Atezolizumab but not durvalumab binds and blocks mouse PD-L1.

Product Specifications

Catalog No.	C024P.hLA.05
Product Name	Atezolizumab Biosimilar, Human IgG1 L234A L235A P329G (LALAPG) Fc Silent Mutant, Endotoxin 0.05 EU/mg
Supplier Name	Syd Labs, Inc.
Brand Name	Syd Labs
Synonyms	Programmed death-ligand 1, PD-L1, cluster of differentiation 274, CD274, B7 homolog 1, B7-H1
Summary	Recombinant Humanized IgG1 Monoclonal Antibody.
Isotype	Human IgG1 LALAPG Fc Silent Mutant
Source/Host	Produced in the atezolizumab biosimilar CHO stable cell line.
Specificity	Specifically binds to the human PDL1 protein.

Properties & Storage

Applications	ELISA, neutralization, functional assays such as bioanalytical PK and ADA assays.
Formulation	0.2 µM filtered solution, pH 6.0, no stabilizers or preservatives.
Endotoxin	< 0.05 EU per 1 mg of the protein by the LAL method.
Purity	>95% by SDS-PAGE under reducing conditions and HPLC.
Shipping	Shipped with ice pack. Store immediately at recommended temperature.
Storage	12 months from receipt at -20 to -70°C; 1 month at 2 to 8°C. Avoid freeze-thaw cycles.

Background & Description

Atezolizumab is a humanized monoclonal antibody directed against the human protein ligand PD-L1, with potential immune checkpoint inhibitory and antineoplastic activities. Atezolizumab is an Fc-engineered, humanized, monoclonal antibody (IgG1κ isotype). Atezolizumab biosimilar uses the same protein sequences as the therapeutic antibody atezolizumab.

Atezolizumab lacks the N-glycosylation site in its Fc region by changing an aspartic acid into alanine at amino acid position 298 (amino acid position 297 according to EU nomenclature, N297A) in the heavy chain leading to minimized binding to FcγRs. The LALAPG mutation (L234A/L235A/P329G) completely abolishes binding to Fc gamma receptors and complement C1q.