

ALADDIN SCIENTIFIC CORPORATION

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## Certificate of Analysis

Date of Testing: 2023-12-13 14:17:07  
Date of Next Testing: 2025-12-12 14:17:07

Product Name: Spartalizumab (anti-PD-1)  
Lot #: ZJ23F1202018  
SKU #: Ab169299  
Version: 2  
Analysis #: 001216  
Clone ID:

Isotype: Human IgG4SP  
Source: CHO supernatant  
Formulation: Liquid  
Concentration: 4.59mg/mL  
Buffer Solution: Supplied as a 0.22 µm filtered solution in 100mM Pro-Ac, 20mM Arg, pH 5.0

Storage Conditions: Store at -80°C, Avoid repeated freezing and thawing  
Analysis: 001216

Parameter	Limit Value	Result
Purity(SDS-PAGE)	95-100(%)	100.00000 %
Purity (SEC)	95-100(%)	100.00000 %
Molecular Weight	158.3-193.5(kD)	175.90000 kD
Appearance(Ab169299)	Colourless liquid	Colourless liquid
Endotoxin Level < 1 EU/mg	Conform	Conform
PD-1 binding	Conform	Conform



Sophia Cheng  
Quality Assurance