

Rev04
Update: Oct,19,2022

DATASHEET

Human PD-1 Antibody (PD1.D3), mAb, Mouse

Cat. No.: A01829

Overview

Specificity	The product is specific for human PD-1 (UniProt Accession: Q15116). This antibody blocks human PD-L1 binding with human PD-1 expression cell line in flow cytometry assay.
Host Species	Mouse
Immunogen	Recombinant human PD-1-Fc (Z03370)
Conjugate	Unconjugated

Applications

Working concentrations for specific applications should be determined by the investigators. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

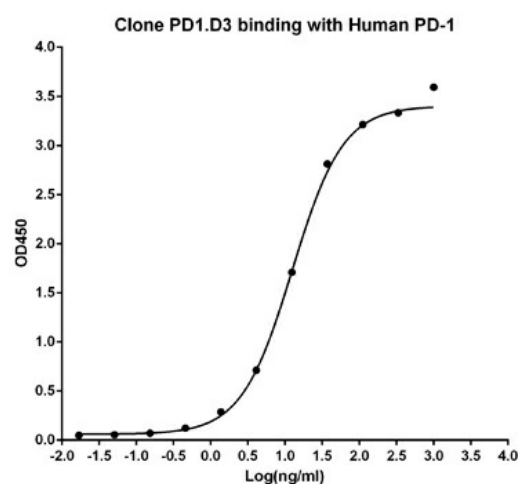
Application	Recommended Usage
ELISA	0.01-0.1 µg/ml
Competitive ELISA	10-50 µg/ml
Flow Cytometry	2-10 µg/ml
Flow cytometry	2-10 µg/ml

Properties

Form	Lyophilized
Storage Buffer	lyophilized with PBS, pH 7.4, containing 0.02% sodium azide.
Reconstitution	Reconstitute the lyophilized powder with deionized water (or equivalent) to an final concentration of 0.5 mg/mL.

Storage Instructions	The lyophilized product remains stable up to 1 year at -20 °C from date of receipt. Upon reconstitution, it can be stored for 2-3 weeks at 2-8 °C or for up to 12 months at -20 °C or below. Avoid repeated freezing and thawing cycles.
Purification	Protein A affinity column
Isotype	Mouse IgG1, κ
Clonality	Monoclonal
Clone ID	PD1.D3
Note	GenScript can customize this product per customer's request including product size, buffer components, etc.

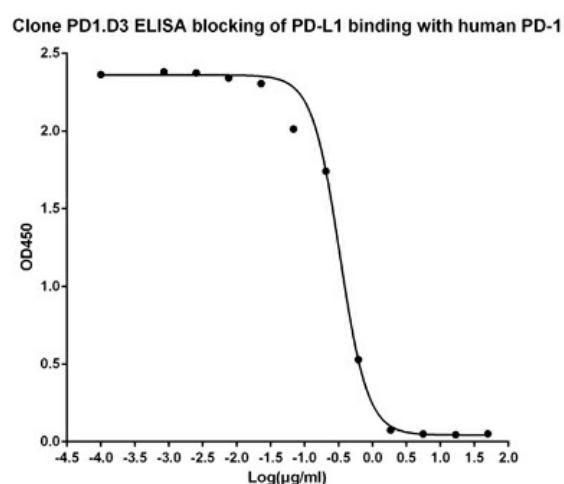
Examples



ELISA binding of **human PD-1 antibody PD1.D3** (GenScript, A01829) with Human PD-1 recombinant protein (Z03370, PD 1 Fc Chimera, Human).

Coating antigen: PD-1-Fc, 1 μ g/ml.

PD-1 antibody dilution start from 1000ng/ml, EC50= 12.5 ng/ml

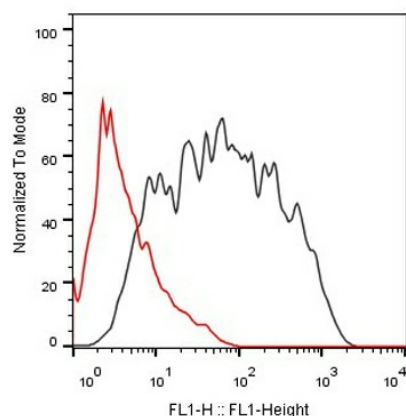


ELISA blocking of **human PD-1 antibody PD1.D3** (GenScript, A01829) against Human PD-L1 recombinant protein (Z03371, PD 1 Fc Chimera, Human) binding with Human PD-1 recombinant protein (Z03370, PD 1 Fc Chimera, Human).

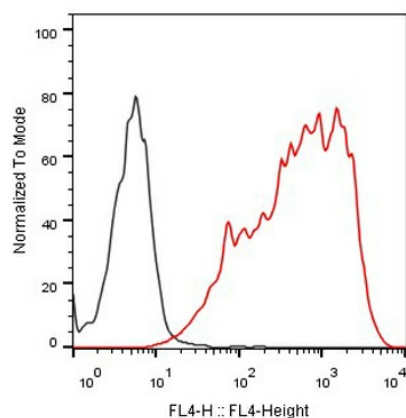
Coating antigen: PD-1-Fc, 1 μ g/ml.

PD-L1-Fc final concentration: 0.5 μ g/ml

PD-1 antibody dilution start from 50 μ g/ml, IC50= 0.33 μ g/ml



FACS ligand blocking tests of **Human PD-1 Antibody PD1.D3** (GenScript, A01829) blocks the binding of human PD-1 cell line (GenScript, M00529) with Human PD-L1 (Z03371, PD L1 Fc Chimera, Human. Red) and CHO negative control cell (Black). Antibody working concentration: 5 µg/ml, 2.5×10^5 cells/reaction
Ligand (PD-L1) working concentration: 1 µg/ml
The signal was developed with Alexa Fluor 647 Conjugated Affinipure Goat anti-human IgG (H + L).



Flow cytometric analysis of CHO-K1/PD1 stable cell expressing PD-1 (GenScript, M00529, Red) and CHO negative control cell (Black) with **Human PD-1 Antibody PD1.D3** (GenScript, A01829)
Antibody working concentration: 5 µg/ml, 2.5×10^5 cells/reaction
The signal was developed with iFluor647 conjugated Goat Anti-Mouse IgG

Background

Target Background : Programmed cell death protein 1 (PD-1), is cell surface receptor expressing on T cells and pro-B cells. Binding of its two ligands PD-L1 and PD-L2 could result in down-regulation of the immune system by inhibiting the T-cell activation process. Thus, PD-1 is an important immune checkpoint and popular target for therapeutic antibodies against many cancers. GenScript Human PD-1 Antibody (PD1.D3), mAb, Mouse is produced from the hybridoma resulting from fusion of SP2/0 myeloma and B-lymphocytes obtained from mouse immunized with recombinant human PD-1-Fc (Z03370).

Synonyms : Mouse monoclonal to programmed cell death 1/ PD-1/ CD279/ SLEB2/ hPD-1/ hPD-I/ hSLE1.

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.