

DESCRIPTION

Target:	PD-1
Target aliases:	PD1, PDCD1, CD279, HSLE1, SLEB2, HPD-1, HPD-L
Fc isotype:	IgG2a
Membrane proteome specificity:	Monospecific for 6,000 membrane proteins tested
Species reactivity:	Human (Others untested)
Extracellular epitope:	Yes
Fc modifications:	C-terminal Avitag ¹ , disabled Fc- γ receptor binding ²
Source:	Recombinant CHO expression; purified by Protein A chromatography
Formulation:	Endotoxin Free PBS pH 7.4, sterile-filtered
Concentration:	1 mg/ml

1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc- γ receptor binding site to minimize non-specific antibody binding.

PD-1 TARGET INFORMATION

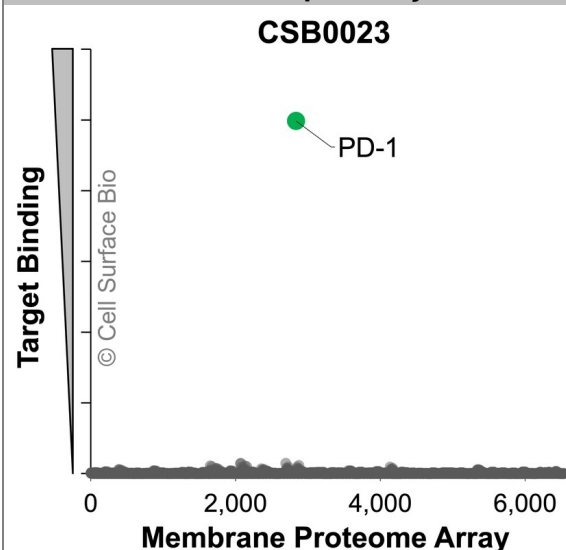
PD-1 is single-pass transmembrane protein and an immune-inhibitory receptor on activated T-cells. PD-1 plays a role in regulation of T-cell functions and is important for protecting against autoimmunity. PD-1 can also inhibit anti-microbial and anti-tumor immunity, and is expressed in various tumors, including melanomas. (NCBI Gene: 5133, UniProtKB/Swiss-Prot: Q15116) Other names: PD1, PDCD1, CD279, HSLE1, SLEB2, HPD-1, HPD-L

SHIPPING AND STORAGE

Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA

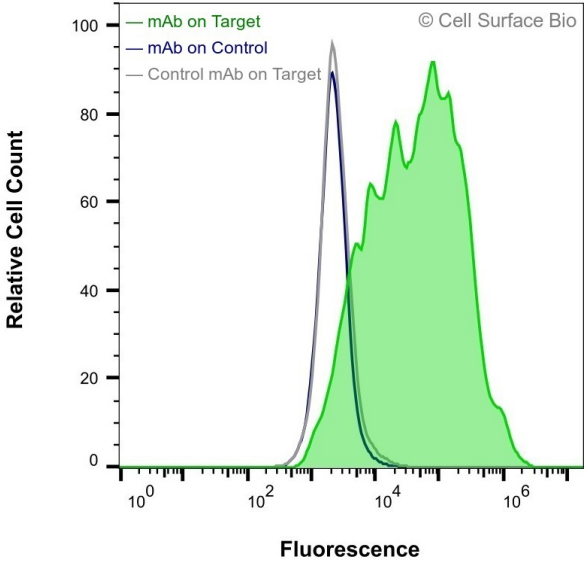
Membrane Proteome Specificity



The specificity of PD-1 Monoclonal Antibody (CSB0023) was tested on the Membrane Proteome Array™ and shown to be specific for PD-1.

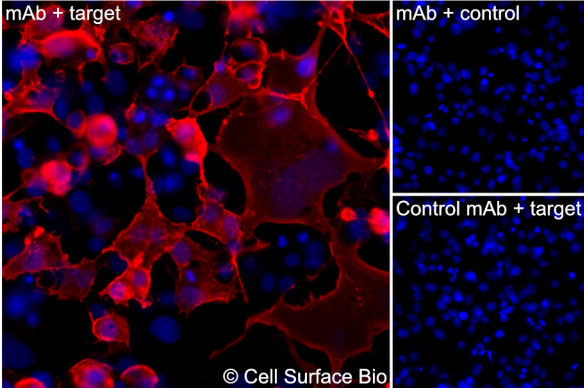
The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed human cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies and other protein ligands.

Applications	Conditions	Recommended concentration
Flow Cytometry, Extracellular	Live, Unpermeabilized	1 µg/ml



HEK-293F cells transiently transfected with PD-1 were stained with PD-1 Monoclonal Antibody (CSB0023)(green) or isotype control antibody (gray), followed by AlexaFluor 647- conjugated anti- IgG secondary antibody. HEK-293F cells transiently transfected with an empty control vector were also stained with PD-1 Monoclonal Antibody (CSB0023)(blue).

Applications	Conditions	Recommended concentration
Immunofluorescence, Extracellular	Fixed 4% paraformaldehyde	1 µg/ml



(Left) COS-7 cells transiently transfected PD-1 were stained with PD-1 Monoclonal Antibody (CSB0023) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) COS-7 cells transiently transfected with an empty control vector stained with PD-1 Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with PD-1 and stained with control MAb.

Applications

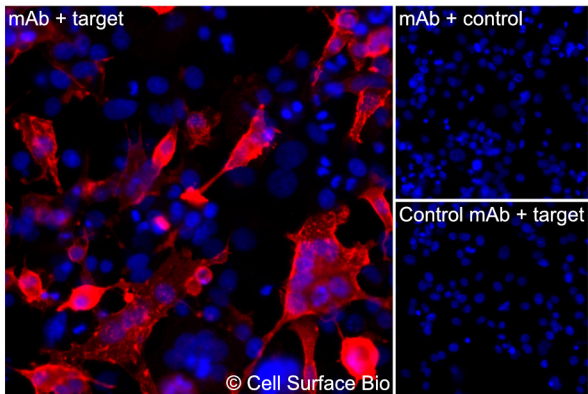
Immunofluorescence, Intracellular

Conditions

Fixed 4% paraformaldehyde,
Permeabilized 0.1% Triton X-100

Recommended concentration

1 µg/ml



(Left) COS-7 cells transiently transfected PD-1 were permeabilized and stained with PD-1 Monoclonal Antibody (CSB0023) followed by AlexaFluor 647 anti- IgG secondary antibody (red) and DAPI (blue). (Top right) COS-7 cells transiently transfected with an empty control vector stained with PD-1 Monoclonal Antibody. (Bottom right) Isotype control: COS-7 cells transfected with {{target}} and stained with control MAb.