

Product Datasheet

PD-1 mAb (29F.1A12)™, InVivoPure+ (orb2568777)

Catalog Number	orb2568777
Category	Antibodies
Description	<p>Programmed death-1 (PD-1) is a cell surface receptor that functions as a T cell checkpoint and plays a central role in regulating T cell exhaustion. Binding of PD-1 to its ligand, programmed death-ligand 1 (PD-L1), activates downstream signaling pathways and inhibits T cell activation. Moreover abnormally high PD-L1 expression on tumor cells and antigen-presenting cells in the tumor microenvironment mediates tumor immune escape, and the development of anti-PD-1/PD-L1 antibodies has recently become a hot topic in cancer immunotherapy. The 29F.1A12 antibody is a monoclonal antibody directed against the mouse protein PD-1 (Programmed Death-1), also known as CD279. It blocks the binding of PD-1 to its two ligands, PD-L1 and PD-L2.</p>
Target	PD-1
Clonality	Monoclonal
Species/Host	Rat
Isotype	Rat IgG2a k
Conjugation	Unconjugated
Reactivity	Mouse
Form/Appearance	Clear Liquid, PBS, pH 7.4, 0.2 µm sterile filtered
Concentration	≥ 1 mg/ mL
Buffer/Preservatives	Clear Liquid, PBS, pH 7.4, 0.2 µm sterile filtered

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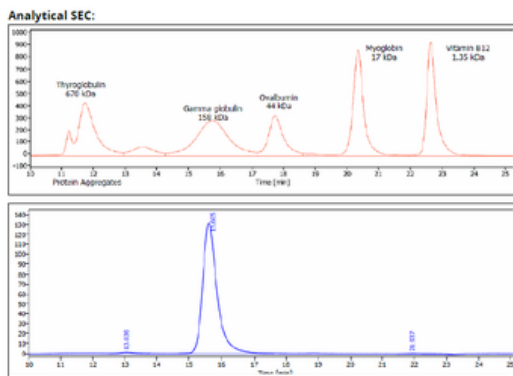
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Purity	$\geq 95\%$ (CGE, reducing conditions) $\leq 5\%$ aggregates (analytical SEC) Endotoxin level ≤ 1 EU/mg
Immunogen	The antibody was raised by immunizing rats with plasmid DNA containing PD-1. Boost immunizations were done with PD-1-Igfusion proteins.
UniProt ID	Q02242
Application notes	Recommended Isotype: Rat IgG2a Isotype control, Recommended Isotype Catalog: orb2568795
Antibody Type	Primary Antibody
Clone Number	29F.1A12TM
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Note	For research use only
Expiration Date	12 months from date of receipt.



Analytical SEC of purified protein (blue) in comparison with gel filtration standard (red).

SEC-HPLC purity analysis of orb2568777.

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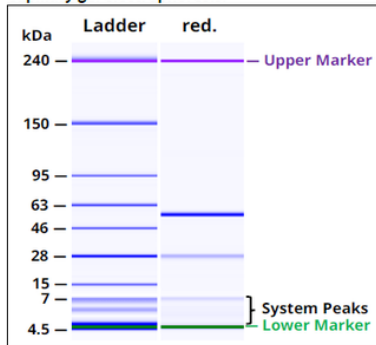
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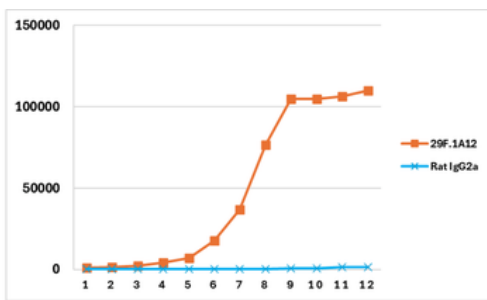
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Capillary gel electrophoresis:



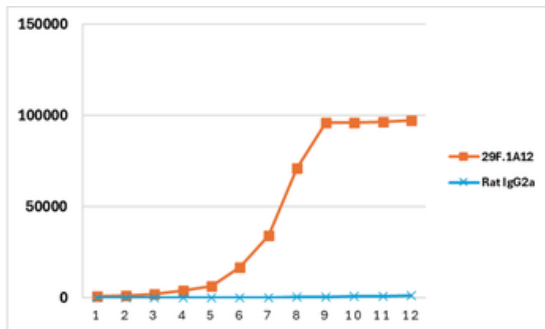
CGE of the purified protein under reducing (red.) conditions.

SDS-PAGE gel analysis of orb2568777.



29F.1A12, (1.4mg/ml) 10ug/ml and twelve 3-fold dilutions
Cells: 300-mPD-1, 75,000 cell/well
2nd Ab: Goat anti-rat IgG-PE Southern 2014-31, 10ug/ml

Standard curve for orb2568777 ELISA kit.



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Cells: 300-mPD-1, 75,000 cell/well
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Standard curve for orb2568777 ELISA kit.

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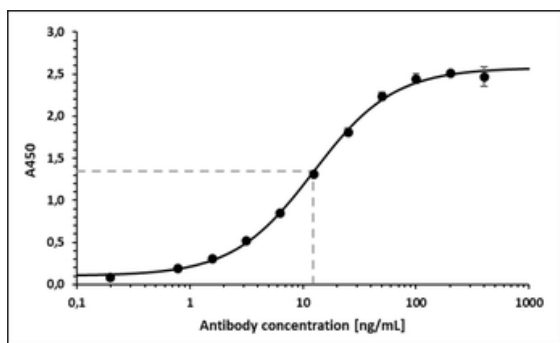
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Standard curve for orb2568777 ELISA kit.

ELISA analysis of PD-1 mAb (29F.1A12). Coating antigen: Mouse PD-1 His-tag, Rec. Protein at 1 µg/mL. The EC50 of the antibody is 12,39 ng/mL.

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