# Anti-mouse PD1 Antibody for Flow Cytometry (Clone: RMP1-14.1, Human IgG1 Fc Silent Kappa) | PA007504.h1Fs

**Catalog No.:** PA007504.h1Fs | **Isotype:** Human IgG1 Fc Silent Kappa | **Flow Cytometry / In Vivo Grade**

Recombinant anti-mouse PD1 monoclonal antibody (Clone RMP1-14.1), engineered with a Human IgG1 Fc-Silent domain to eliminate ADCC/CDC and minimize non-specific Fc receptor binding during flow cytometry, immunohistochemistry, and in vivo blocking assays. Variable regions are derived from the classic rat anti-mouse PD-1 clone RMP1-14 and recombinantly expressed in mammalian cells.

## Product Specifications

| | |
|---|---|
| **Catalog No.** | PA007504.h1Fs |
| **Product Name** | Recombinant Anti-mouse PD1 Monoclonal Antibody (Clone: RMP1-14.1), Human IgG1 Fc Silent Kappa |
| **Synonyms** | Programmed Cell Death Protein 1, PD-1, CD279, Cluster of Differentiation 279, RMP1-14 |
| **Clone & Isotype** | RMP1-14.1 \| Human IgG1 Fc Silent Kappa |
| **Applications** | Flow cytometry (FC), and Immunohistochemistry - Frozen (IHC-F). |
| **Reactivity & Specificity** | Mouse PD1 protein. The recombinant RMP1-14.1 antibody for Flow Cytometry specifically binds to mouse PD1 protein. |
| **Source / Host** | The anti-mouse PD1 monoclonal antibody (clone: RMP1-14.1) for Flow Cytometry was produced in mammalian cells. |
| **Formulation & Conjugate** | 0.2 uM filtered solution, pH 7.4, containing 0.09% sodium azide. Non-conjugated. |
| **Purity** | **>95%** by SDS-PAGE under reducing conditions. |
| **Shipping** | The Recombinant Anti-mouse PD1 Monoclonal Antibody (Clone: RMP1-14.1) for Flow Cytometry, Human IgG1 Fc Silent Kappa is shipped with ice pack. Upon receipt, store it immediately at the temperature recommended below. |
| **Stability & Storage** | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, 2 to 8°C as supplied. Do not freeze it. |

## Biological Description & Background

Recombinant Human IgG1 Monoclonal Antibody with Fc silent mutation.

The rat anti-mouse PD-1 monoclonal antibody (clone No. RMP1-14, rat IgG2a kappa) reacts with the mouse PD-1 protein (CD279 or programmed death-1) encoded by the mouse pdcd1 gene, a member of the CD28 family of the Ig superfamily. PD-1 has two ligands, PD-L1 and PD-L2, both of which belong to the B7 family. It has been shown that in mouse models of melanoma, tumor growth can be transiently arrested via treatment with the anti-mouse PD 1 antibody and the anti-mouse PD L1 antibody which block the interaction between the PD-L1 protein and its receptor PD-1 protein. The RMP1-14 antibody blocks the binding of both the mouse PD-L1 protein and the mouse PD-L2 protein to the mouse PD-1 protein.

Engineered with a Human IgG1 Fc Silent domain, clone RMP1-14.1 eliminates ADCC/CDC effector functions and prevents non-specific Fc receptor binding, providing an optimal Fc-silent reagent for high-precision flow cytometry, immunohistochemistry, and in vivo blocking assays. Our recombinant RMP1-14 antibodies have a part (variable regions) or complete amino acid sequences of the rat anti-mouse PD-1 antibody (hybridoma clone name or number: RMP1-14). The murinized anti-mouse PD-1 recombinant antibody has not only the constant regions of the mouse IgG antibodies but also the murinized variable regions.

## Ordering & Technical Support

For custom volume ordering or inquiries, please visit the product webpage or contact our support team:

- **Product Webpage:** https://www.ushelf.com/anti-mouse-pd1-monoclonal-antibody-pa007504-h1fs/
- **Order Phone:** 1-617-401-8149 | **Fax:** 1-617-606-5022
- **Support Email:** message@sydlabs.com