

Anti-Mouse PD-1 (CD279) [RMP1-14] In Vivo Antibody | PA007162.rt

Catalog No.: PA007162.rt | Isotype: Rabbit IgG, Kappa | In Vivo Grade

PRODUCT DESCRIPTION

The rat anti-mouse PD-1 monoclonal antibody (clone No. RMP1-14.1, 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 and colon cancer, tumor growth can be transiently arrested via anti-mouse PD-1 antibody treatment and anti-mouse PD-L1 antibody interventions which block the therapeutic interaction between the PD-L1 protein and its receptor PD-1 protein. The RMP1-14.1 blocking antibody effectively blocks the reciprocal binding of both the mouse PD-L1 protein and the mouse PD-L2 protein to the mouse PD-1 protein during in vivo checkpoints blocking.

Our recombinant RMP1-14.1 antibody is engineered with 100% precise amino acid sequences of the variable regions derived from the original rat hybridoma (clone: RMP1-14). Expressed in advanced mammalian cells, this in vivo grade recombinant anti-mouse PD-1 antibody delivers superior batch-to-batch consistency with high binding affinity (<2 nM) and purity >95%. Available in versatile formats including the classic rat IgG2a and the Fc-silent mouse IgG2c LALAPG (L234A/L235A/P329G) platforms, this low endotoxin (<1 EU/mg), azide-free formulation eliminates non-specific cell activation, making it ideal for immunohistochemistry (IHC), Flow Cytometry (FC), in vitro neutralization, and long-term in vivo functional assays.

PRODUCT SPECIFICATIONS

Catalog No.	PA007162.rt
Product Name	In Vivo Grade Recombinant Anti-mouse PD-1 Monoclonal Antibody (Clone RMP1-14.1), Rabbit IgG
Supplier Name	Syd Labs, Inc.
Brand Name	Syd Labs
Synonyms	Mouse Anti-Mouse PD 1 Monoclonal Antibodies, Murinized Anti-Mouse PD 1 Monoclonal Antibodies
Summary	The In Vivo Grade Recombinant Anti-mouse PD-1 Rabbit IgG Monoclonal Antibody (Clone RMP1-14.1) was produced in mammalian cells.
Clone	RMP1-14.1, the same variable region and constant region sequences as the rat anti-mouse PD-1 monoclonal antibody (clone number: RMP1-14)
Isotype	Rabbit IgG, kappa
Applications	immunohistochemistry (IHC), Flow Cytometry (FC), and various in vitro and in vivo functional assays.
Immunogen	The original rat hybridoma (clone name: RMP1-14) was generated by immunizing Sprague Dawley rats with mouse PD-1-transfected BHK cells and using a P3U1 myeloma as the fusion partner.
Form Of Antibody	0.2 µM filtered solution of 1x PBS.
Endotoxin	Less than 1 EU/mg of protein as determined by LAL method.
Purity	>95% by SDS-PAGE under reducing conditions.
Shipping	The In Vivo Grade Recombinant Anti-mouse PD-1 Rabbit IgG Monoclonal Antibody (Clone RMP1-14.1)