

**Mouse Anti-PD1/PDCD1/CD279 [NAT105]: MC0547, MC0547RTU7**

**Intended Use:** For Research Use Only

**Description:** Programmed death-1 (PD1) is a member of the CD28 family of receptors that includes CD28, cytotoxic T-lymphocyte-associated antigen 4 (CTLA-4), inducible costimulator (ICOS), and B- and T-lymphocyte attenuator. These receptors play a role in the cellular immune response. PD1 is a new marker of angioimmunoblastic lymphoma and suggests a unique cell of origin for this neoplasm. Unlike CD10 and bcl-6, PD1 is expressed by few B cells, so it may be a more specific and useful diagnostic marker in angioimmunoblastic lymphoma. It also seems to stain a greater percentage of CD3-positive neoplastic cells in angioimmunoblastic lymphoma than either CD10 or bcl-6. In addition, PD1 expression provides new evidence that angioimmunoblastic lymphoma is a neoplasm derived from germinal center-associated T cells. PD1 expression in angioimmunoblastic lymphoma lends further support to this model of T-cell oncogenesis, in which specific subtypes of T cells may undergo neoplastic transformation and result in specific distinct histologic, immunophenotypic, and clinical subtypes of T-cell neoplasia.

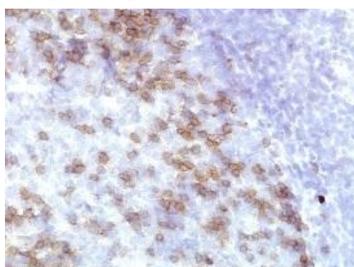
**Specifications:**

Clone: NAT105  
 Source: Mouse  
 Isotype : IgG1k  
 Reactivity: Human  
 Localization: Cytoplasm  
 Formulation: Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN<sub>3</sub>).  
 Storage: Store at 2°- 8°C.  
 Applications: IHC, Flow Cyt., WB  
 Package:

Description	Catalog No.	Size
PD1/PDCD1/CD279 Concentrated	MC0547	1 ml
PD1/PDCD1/CD279 Prediluted	MC0547RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Angioimmunoblastic lymphoma  
 Concentrated Dilution: 25-100  
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual  
 \* Result should be confirmed by an established diagnostic procedure.



FFPE human tonsil tissue stained with anti-PD1 using DAB

**References:**

1. Pattern of CD14+ follicular dendritic cells and PD1+ T cells independently predicts time to transformation in follicular lymphoma. Smeltzer JP, et al. Clin Cancer Res. Jun 1;20(11):2862-72, 2014.
2. PD-1 expression on peripheral blood T-cell subsets correlates with prognosis in non-small cell lung cancer. Waki K, et al. Cancer Sci. Oct;105(10):1229-35, 2014.
3. Immunomodulating antibodies in the treatment of metastatic melanoma: the experience with anti-CTLA-4, anti-CD137, and anti-PD1. Simeone E, et al. J Immunotoxicol. Jul-Sep;9(3):241-7, 2012.

Doc. 100- MC0547  
Rev. A