abcam

Product datasheet

# Anti-PD1 antibody [NAT105] - BSA and Azide free ab201811

Recombinant

1 References 5 Images

## Overview

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|---|---|
| **Product name** | Anti-PD1 antibody [NAT105] - BSA and Azide free |
| **Description** | Mouse monoclonal [NAT105] to PD1 - BSA and Azide free |
| **Host species** | Mouse |
| **Tested applications** | **Suitable for:** ICC/IF, WB, Flow Cyt, Flow Cyt (Intra), IHC-P |
| **Species reactivity** | **Reacts with:** Human |
| **Immunogen** | Tissue, cells or virus corresponding to Human PD1. TY cells (human T/NK cell Leukemia). Database link: **Q15116** |
| **Positive control** | IHC-P: Human tonsil tissue. Flow cyto (intra): Human PBMCs |
| **General notes** | ab201811 is the carrier-free version of **ab52587**.<br><br>Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.<br><br>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.<br><br>Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.<br><br>This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. |

## Properties

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| **Form** | Liquid |
| **Storage instructions** | Shipped at 4°C. Store at +4°C. Do Not Freeze. |
| **Storage buffer** | pH: 7.2<br>Constituent: PBS |

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|---|---|
| **Carrier free** | Yes |
| **Purity** | Protein G purified |
| **Clonality** | Monoclonal |
| **Clone number** | NAT105 |
| **Isotype** | IgG1 |
| **Light chain type** | kappa |

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab201811 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|---|---|---|
| **ICC/IF** | | Use at an assay dependent concentration. |
| **WB** | | Use at an assay dependent concentration. Predicted molecular weight: 32 kDa.<br>See **Western blot protocol**. |
| **Flow Cyt** | | Use at an assay dependent concentration. |
| **Flow Cyt (Intra)** | | Use at an assay dependent concentration. |
| **IHC-P** | | Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.<br>Perform heat-mediated antigen retrieval using Sodium citrate buffer (pH 6.0), 20 mins. |

## Target

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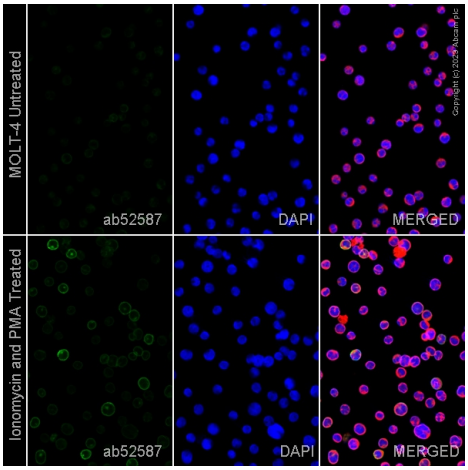
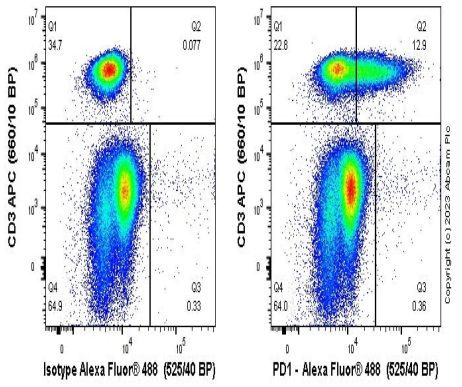
|---|---|
| **Function** | Possible cell death inducer, in association with other factors. |
| **Involvement in disease** | Genetic variation in PDCD1 is associated with susceptibility to systemic lupus erythematosus type 2 (SLEB2) [MIM:605218]. Systemic lupus erythematosus is a chronic, inflammatory and often febrile multisystemic disorder of connective tissue. It affects principally the skin, joints, kidneys and serosal membranes. It is thought to represent a failure of the regulatory mechanisms of the autoimmune system. |
| **Sequence similarities** | Contains 1 Ig-like V-type (immunoglobulin-like) domain. |
| **Developmental stage** | Induced at programmed cell death. |
| **Cellular localization** | Membrane. |

## Images




Immunocytochemistry/ Immunofluorescence - Anti-PD1 antibody [NAT105] - BSA and Azide free (ab201811)

This data was developed using the same antibody clone in a different buffer formulation containing BSA and sodium azide (**ab52587**). **ab52587** staining PD1 in MOLT4 treated with Ionomycin (500 ng/ml, 24 h) and PMA (10 ng/ml, 24 h) cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with **ab52587** at 5µg/ml and **ab6046**, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with **ab150117**, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and **ab150080**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolour magenta). Nuclear DNA was labelled with DAPI (shown in blue). Also suitable in cells fixed with 4% paraformaldehyde (10 min).Image was acquired with a confocal microscope (Leica-Microsystems TCS SP8) and a single confocal section is shown.



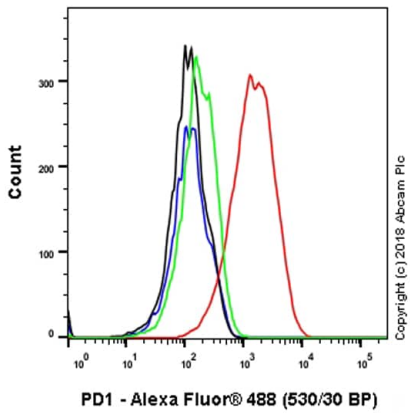

Flow Cytometry - Anti-PD1 antibody [NAT105] - BSA and Azide free (ab201811)

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab234444**).

Flow cytometry staining of human peripheral blood mononuclear cells (PBMCs) with **ab234444** (right) or Mouse IgG1, kappa monoclonal [15-6E10A7] - Isotype Control (left). PBMCs were incubated for 30 min on ice in 1x PBS containing 10 µg/ml human IgG and 10 % normal goat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody **ab234444** or Mouse IgG1, kappa monoclonal [15-6E10A7] - Isotype Control (1x $10^6$ in 100 µl at 5.0 µg/ml (1/516)) for 30min on ice. The cells were simultaneously stained with CD3.

The secondary antibody Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min on ice

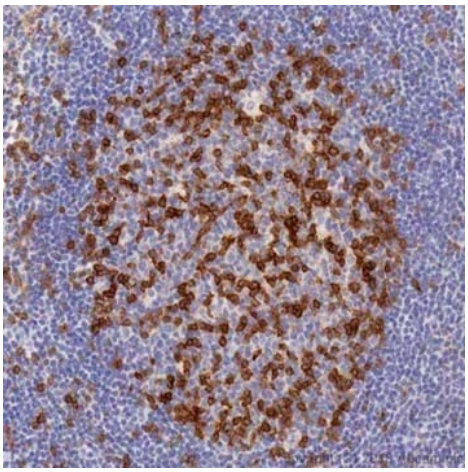
Acquisition of >30000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter. Events were gated on viable cells.




Flow Cytometry (Intracellular) - Anti-PD1 antibody [NAT105] - BSA and Azide free (ab201811)

Intracellular flow cytometric analysis ofMOLT-4 (human lymphoblastic leukemia cell line) cell line treated with ionomycin (500 ng/ml, 24h) and PMA (10 ng/ml, 24h)labeling PD1 with **ab234444** at 1/1000 dilution (red) and an untreated control (green) compared with aMouse monoclonalIgG1 (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Mouse IgG H&L (Alexa Fluorr® 488) (**ab150113**) at 1/2000 dilution was used as the secondary antibody. Gated on viable cells.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab234444**).

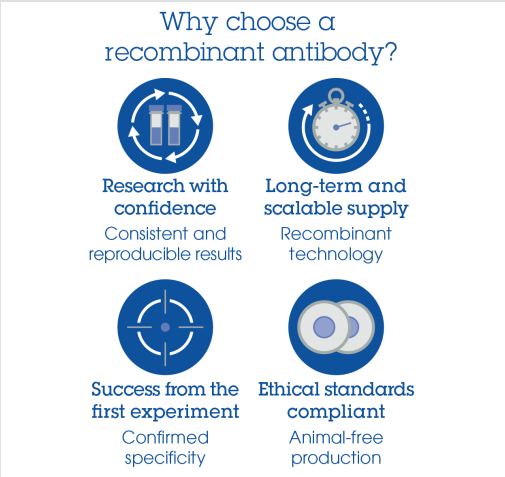


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PD1 antibody [NAT105] - BSA and Azide free (ab201811)

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling PD1 with **ab234444** at 1/50 dilution, followed by Rabbit Anti-Mouse IgG + Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining on T cells of human tonsil germinal center is observed. Performed on a Leica Biosystems BOND instrument. Counter stained with hematoxylin.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab234444**).

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.




Anti-PD1 antibody [NAT105] - BSA and Azide free (ab201811)

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