

TECHNICAL DATA SHEET

CyFlow™ IgG2a Purified Mouse Isotype Control

REF AP005692

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	IgG2a Isotype Control
Alternative Names	—
Clone	PPV-04
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG2a
Species Reactivity	n/a
Negative Species Reactivity	Human Mouse Rat Pig
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	< no data >

Specificity

This mouse IgG2a monoclonal antibody (clone PPV-04) reacts with undefined epitope on a plant pathogen.

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Application

The reagent is designed as an isotype control for Flow Cytometry analysis. To establish the amount of non-specific antibody binding, match the concentration of the correct isotype to the recommended working concentration of the antigen-specific antibody. If the background signal of the isotype control is too high (usually when working antibody concentrations are above 10 µg/ml of incubation mixture), change the experimental conditions to reduce the background.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

The specificity of staining by monoclonal antibodies to target antigens should be verified by establishing the amount of non-specific antibody binding. Especially at higher concentration (more than 15µ/ml) the antibody staining usually has consignable background. To this end a non-reactive immunoglobulin of the same isotype is included as a negative control for each specific monoclonal antibody used in a particular immunoassay. The monoclonal antibody PPV-04, generated against a plant pathogen, does not cross-react with other species, and hence all the background that could be observed when working with this antibody would be a result of general nonspecific interactions between an mouse IgG2a molecule and the respective sample under the particular conditions. This shall help the customer to set up the experimental conditions so that the nonspecific binding of any antibody is abolished.

References

- Almeida CR, Vasconcelos DP, Gonçalves RM, Barbosa MA: Enhanced mesenchymal stromal cell recruitment via natural killer cells by incorporation of inflammatory signals in biomaterials. J R Soc Interface. 2012 Feb 7; 9(67):261-71. < PMID: 21752807 >

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- Glier H, Holada K: Blood storage affects the detection of cellular prion protein on peripheral blood leukocytes and circulating dendritic cells in part by promoting platelet satellitism.. J Immunol Methods. 2012 Jun 29; 380(1-2):65-72. < PMID: 22522115 >
- Kneissl J, Keller S, Lorber T, Heindl S, Keller G, Drexler I, Hapfelmeier A, Höfler H, Lubert B: Association of amphiregulin with the cetuximab sensitivity of gastric cancer cell lines. Int J Oncol. 2012 Aug; 41(2):733-44. < PMID: 22614881 >
- Maiolini A, Carlson R, Tipold A: Toll-like receptors 4 and 9 are responsible for the maintenance of the inflammatory reaction in canine steroid-responsive meningitis-arteritis, a large animal model for neutrophilic meningitis.. J Neuroinflammation. 2012 Sep 27; 9:226. < PMID: 23016675 >
- Sunzenauer S, Zojer V, Brameshuber M, Tröls A, Weghuber J, Stockinger H, Schütz GJ: Determination of binding curves via protein micropatterning in vitro and in living cells. Cytometry A. 2013 Sep; 83(9):847-54. < PMID: 23125142 >
- Vogel K, Thomann S, Vogel B, Schuster P, Schmidt B: Both plasmacytoid dendritic cells and monocytes stimulate natural killer cells early during human herpes simplex virus type 1 infections. Immunology. 2014 Dec; 143(4):588-600. < PMID: 24943264 >
- Rygh CB, Wang J, Thuen M, Gras Navarro A, Huuse EM, Thorsen F, Poli A, Zimmer J, Haraldseth O, Lie SA, Enger PØ, Chekenya M: Dynamic Contrast Enhanced MRI Detects Early Response to Adoptive NK Cellular Immunotherapy Targeting the NG2 Proteoglycan in a Rat Model of Glioblastoma. PLoS One. 2014 Sep 30; 9(9):e108414. < PMID: 25268630 >
- Thomann S, Boscheinen JB, Vogel K, Knipe DM, DeLuca N, Gross S, Schuler-Thurner B, Schuster P, Schmidt B: Combined cytotoxic activity of an infectious, but non-replicative herpes simplex virus type 1 and plasmacytoid dendritic cells against tumour cells. Immunology. 2015 Oct; 146(2):327-38. < PMID: 26194553 >
- Mehling M, Burgener AV, Brinkmann V, Bantug GR, Dimeloe S, Hoenger G, Kappos L, Hess C: Tissue Distribution Dynamics of Human NK Cells Inferred from Peripheral Blood Depletion Kinetics after Sphingosine-1-Phosphate Receptor Blockade.. Scand J Immunol. 2015 Nov; 82(5):460-6. < PMID: 26285786 >
- Hromadnikova I, Li S, Kotlabova K, Dickinson AM: Influence of In Vitro IL-2 or IL-15 Alone or in Combination with Hsp 70 Derived 14-Mer Peptide (TKD) on the Expression of NK Cell Activatory and Inhibitory Receptors on Peripheral Blood T Cells, B Cells and NKT Cells.. PLoS One. 2016 Mar 16; 11(3):e0151535. < PMID: 26982331 >

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The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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