

1F-585-T025

Monoclonal Antibody to CD203c Fluorescein (FITC) conjugated (25 tests)

Clone: NP4D6

Isotype: Mouse IgG1

Specificity: The mouse monoclonal antibody NP4D6 reacts with CD203c, a transmembrane

ectoenzyme expressed on basophils and mast cells, and overexpressed upon their

activation. HLDA VIII

11257

Regulatory Status: RUO

Immunogen: HEK-293 cells transfected with human CD203c

Species Reactivity: Human

Preparation: The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under

optimum conditions. The reagent is free of unconjugated FITC and adjusted for

direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using 4

μl reagent / 100 μl of whole blood or 10° cells in a suspension.

The content of a vial (0.1 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

Background: CD203c, also known as ENPP-3, is integral membrane ectoenzyme

(ectonucleotide pyrophosphatase/phosphodiesterase 3), that hydrolyses nucleotide triphosphates and thus modulates purinergic signaling. CD203c is expressed mainly on activated basophils and mast cells. CD203c is upregulated in response to IgE-receptor cross-linking and is overexpressed on neoplastic mast cells in patients with systemic mastocytosis. Measurement of its induced enhancement on

the plasma membrane is useful for diagnostics of allergies.



PRODUCT DATA SHEET

References:

*Hauswirth AW, Escribano L, Prados A, Nuñez R, Mirkina I, Kneidinger M, Florian S, Sonneck K, Vales A, Schernthaner GH, Sanchez-Muñoz L, Sperr WR, Bühring HJ, Orfao A, Valent P: CD203c is overexpressed on neoplastic mast cells in systemic mastocytosis and is upregulated upon IgE receptor cross-linking. Int J Immunopathol Pharmacol. 2008 Oct-Dec;21(4):797-806.

*Tokuda R, Nagao M, Hiraguchi Y, Hosoki K, Matsuda T, Kouno K, Morita E, Fujisawa T: Antigen-induced expression of CD203c on basophils predicts IgE-mediated wheat allergy. Allergol Int. 2009 Jun;58(2):193-9.

*Wanich N, Nowak-Wegrzyn A, Sampson HA, Shreffler WG: Allergen-specific basophil suppression associated with clinical tolerance in patients with milk allergy. J Allergy Clin Immunol. 2009 Apr;123(4):789-94.e20.

*Chirumbolo S, Brizzi M, Ortolani R, Vella A, Bellavite P: Inhibition of CD203c membrane up-regulation in human basophils by high dilutions of histamine: a controlled replication study. Inflamm Res. 2009 Nov;58(11):755-64.

*Bühring HJ, Simmons PJ, Pudney M, Müller R, Jarrossay D, van Agthoven A, Willheim M, Brugger W, Valent P, Kanz L: The monoclonal antibody 97A6 defines a novel surface antigen expressed on human basophils and their multipotent and unipotent progenitors. Blood. 1999 Oct 1;94(7):2343-56.

*Bühring HJ, Seiffert M, Giesert C, Marxer A, Kanz L, Valent P, Sano K: The basophil activation marker defined by antibody 97A6 is identical to the ectonucleotide pyrophosphatase/phosphodiesterase 3. 1. Blood. 2001 May 15;97(10):3303-5.

*Platz IJ, Binder M, Marxer A, Lischka G, Valent P, Bühring HJ: Hymenoptera-venom-induced upregulation of the basophil activation marker ecto-nucleotide pyrophosphatase/phosphodiesterase 3 in sensitized individuals. Int Arch Allergy Immunol. 2001 Dec;126(4):335-42.

*Heneberg P, Riegerová K, Kučera P: Pimecrolimus Is a Potent Inhibitor of Allergic Reactions to Hymenopteran Venom Extracts and Birch Pollen Allergen In Vitro. PLoS One. 2015 Nov 12;10(11):e0142953.

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