

1P-146-T025

## Monoclonal Antibody to CD184 / CXCR4 Phycoerythrin (PE) conjugated (25 tests)

Clone: 12G5

**Isotype:** Mouse IgG2a

Specificity: The mouse monoclonal antibody 12G5 recognizes CD184, a 45 kDa

G-protein-linked CXC chemokine receptor widely expressed on blood and tissue

cells.

HLDA 7; WS Code 70204

Regulatory Status: RUO

**Species Reactivity:** 

Immunogen: CP-MAC-infected Sup-T1 cells

**Preparation:** The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum

conditions. The conjugate is purified by size-exclusion chromatography 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.

Human, Non-Human Primates

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

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

The content of a vial (0.25 ml) is sufficient for 25 tests.

**Expiration:** See vial label

Lot Number: See vial label

Background: CD184, also known as CXCR4 or fusin, is a receptor for the C-X-C chemokine

SDF-1. It is expressed mainly in hematopoietic cells, vascular endothelium, and neural tissue. CD184 is a G-protein coupled receptor containing extracellular N-terminal, seven transmembrane domains and intracellular C-terminal domain. It transduces signal by increasing the intracellular calcium level. CD184 plays an essential role in vascularization of the gastrointestinal tract, and is involved in cerebellar development and in hematopoiesis. It is also a coreceptor (with CD4) for

HIV-1 X4 virus and a primary receptor for some HIV-2 isolates.



## PRODUCT DATA SHEET

## References:

\*Grundler R, Brault L, Gasser C, Bullock AN, Dechow T, Woetzel S, Pogacic V, Villa A, Ehret S, Berridge G, Spoo A, Dierks C, Biondi A, Knapp S, Duyster J, Schwaller J: Dissection of PIM serine/threonine kinases in FLT3-ITD-induced leukemogenesis reveals PIM1 as regulator of CXCL12-CXCR4-mediated homing and migration. J Exp Med. 2009 Aug 31;206(9):1957-70.

\*Uy GL, Rettig MP, Motabi IH, McFarland K, Trinkaus KM, Hladnik LM, Kulkarni S, Abboud CN, Cashen AF, Stockerl-Goldstein KE, Vij R, Westervelt P, DiPersio JF: A phase 1/2 study of chemosensitization with the CXCR4 antagonist plerixafor in relapsed or refractory acute myeloid leukemia. Blood. 2012 Apr 26;119(17):3917-24.

\*Campioni D, Zauli G, Gambetti S, Campo G, Cuneo A, Ferrari R, Secchiero P: In vitro characterization of circulating endothelial progenitor cells isolated from patients with acute coronary syndrome. PLoS One. 2013;8(2):e56377.

\*Koopman G, Mortier D, Hofman S, Koutsoukos M, Bogers WM, Wahren B, Voss G, Heeney JL: Acute-phase CD4+ T-cell proliferation and CD152 upregulation predict set-point virus replication in vaccinated simian-human immunodeficiency virus strain 89.6p-infected macaques. J Gen Virol. 2009 Apr;90(Pt 4):915-26.

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