

30-2935-PE-Cy7: Anti-Human CX3CR1 Monoclonal Antibody (Clone:2A9-1) PE-Cy™ 7 Conjugated

Clonality :	Monoclonal
Clone Name :	2A9-1
Application :	FACS
Reactivity :	Human,Non-Human Primates
Conjugate :	PE/CY7
Gene :	CX3CR1
Gene ID :	1524
Uniprot ID :	P49238
Alternative Name :	V28, CCRL1, GPR13, CMKDR1, GPRV28, CMKBRL1, fractalkine receptor
Isotype :	Rat IgG2b kappa
Immunogen Information :	Human CX3CR1 transfectants

Description

Specificity: The rat monoclonal antibody 2A9-1 recognizes an extracellular epitope of CX3CR1, an important regulator of leukocyte trafficking and immune system balance.

Description: CX3CR1 (fractalkine receptor) serves as a regulator of leukocyte trafficking. Its ligand CX3CL1 (fractalkine) can serve both as chemoattractant (soluble) and as adhesive molecule (membrane bound). Binding to the cell surface expressed ligand leads to rapid induction of firm adhesion of CX3CR1-positive cells without requiring selectin-mediated rolling or activation of integrins. This interaction is important for trafficking of cytotoxic effector lymphocytes regardless of their lineage and mode of target cell recognition, through inflamed endothelium. Similarly, it mediates monocyte/macrophage recruitment to inflamed atherosclerotic plaques, as well as in their homing to non-inflamed tissues, where they can differentiate into dendritic cells. CX3CR1 also promotes cell survival, plays a key role in brain microglia, synapse maturation and regulation of inflammatory response in the central nervous system, it acts as a negative regulator of angiogenesis, and serves as an important regulator of the gut microbiota by controlling immunity to intestinal bacteria and fungi.

Product Info

Amount :	100 tests
Purification :	Purified antibody is conjugated with activated tandem dye of R-phycoerythrin-cyanine 7 (PE-Cy™ 7) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Content :	Formulation: Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage condition :	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

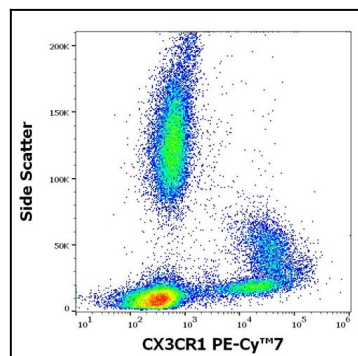


Fig 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CX3CR1 (2A9-1) PE-Cy™ 7 antibody (concentration in sample 0.56 µg/ml).

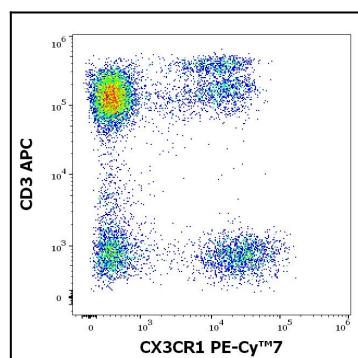


Fig 2: Flow cytometry multicolor surface staining pattern of human lymphocytes stained using anti-human CD3 (UCHT1) APC antibody (10 µl reagent / 100 µl of peripheral whole blood) and anti-human CX3CR1 (2A9-1) PE-Cy™ 7 antibody (concentration in sample 0.56 µg/ml).

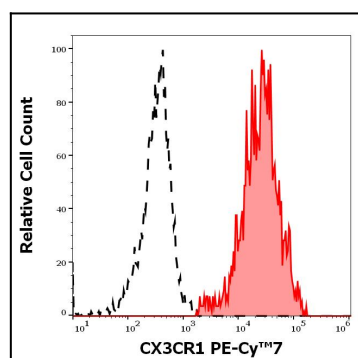


Fig 3: Separation of human CX3CR1 positive CD3 negative lymphocytes (red-filled) from CX3CR1 negative CD3 positive T cells (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CX3CR1 (2A9-1) PE-Cy™ 7 antibody (concentration in sample 0.56 µg/ml).