

### 30-2935: Anti-Human CX3CR1 Monoclonal Antibody (Clone:2A9-1)

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

<b>Amount :</b>	0.1 mg
<b>Purification :</b>	Purified by protein-G affinity chromatography.
<b>Content :</b>	<b>Concentration:</b> 1 mg/ml <b>Formulation:</b> Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
<b>Storage condition :</b>	Store at 2-8°C. Do not freeze.

#### Application Note

**Flow cytometry:** Recommended dilution: 0.5-4 µg/ml.

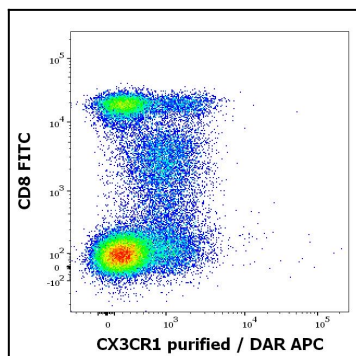


Fig 1: Flow cytometry multicolor surface staining pattern of human lymphocytes stained using anti-human CD8 (MEM-31) FITC antibody (20  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood) and anti-human CX3CR1 (2A9-1) purified antibody (concentration in sample 0.33  $\mu$ g/ml, DAR APC).

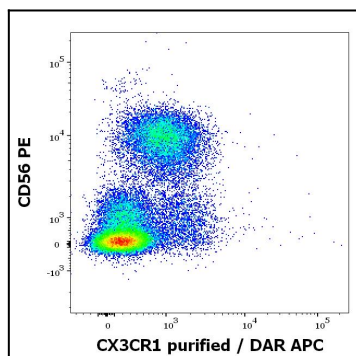


Fig 2: Flow cytometry multicolor surface staining pattern of human lymphocytes stained using anti-human CD56 (LT56) PE antibody (10  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood) and anti-human CX3CR1 (2A9-1) purified antibody (concentration in sample 0.33  $\mu$ g/ml, DAR APC).

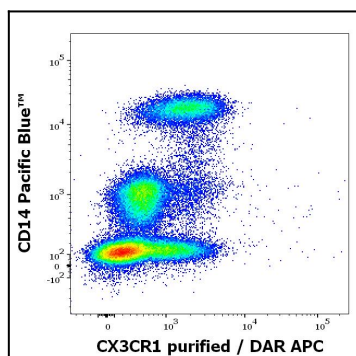


Fig 3: Flow cytometry multicolor surface staining pattern of human leukocytes stained using anti-human CD14 (MEM-15) Pacific Blue™ antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood) and anti-human CX3CR1 (2A9-1) purified antibody (concentration in sample 0.33  $\mu$ g/ml, DAR APC).

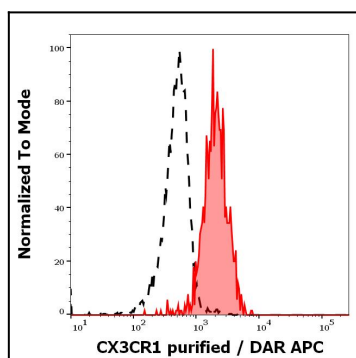


Fig 4: Separation of human non-classical monocytes (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CX3CR1 (2A9-1) purified antibody (concentration in sample 0.33  $\mu$ g/ml, DAR APC).