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# Sialoadhesin/CD169 ELISA Kit





#### Overview

Quantity:	96 tests
Target:	Sialoadhesin/CD169 (SIGLEC1)
Binding Specificity:	AA 20-1639
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	156-10.000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

# **Product Details**

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse CD169/SIGLEC-1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO
	Immunogen sequence: T20-R1639
Specificity:	Expression system for standard: NSO
	Immunogen sequence: T20-R1639
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

### **Product Details**

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette
	tips. Multichannel pipettes are recommended in the condition of large amount of samples in the
	detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation
	of 0.01M TBS: Add 1.2g Tris, 8.5g Nacl
Target Details	
Target:	Sialoadhesin/CD169 (SIGLEC1)
Alternative Name:	SIGLEC1 (SIGLEC1 Products)
Background:	Protein Function: Acts as an endocytic receptor mediating clathrin dependent endocytosis.
	Macrophage-restricted adhesion molecule that mediates sialic-acid dependent binding to
	lymphocytes, including granulocytes, monocytes, natural killer cells, B-cells and CD8 T-cells (By
	similarity). Preferentially binds to alpha- 2,3-linked sialic acid. Binds to SPN/CD43 on T-cells.
	May play a role in hematopoiesis. May act as a counter-receptor for CLEC10A in lymph node
	Background: SIGLEC-1, also known as Sialoadhesin or CD169, is a cell adhesion molecule found
	on the surface of certain cells of the immune system called macrophages. This gene is mapped
	to 20p13. It belongs to the immunoglobulin superfamily(IgSF). Since sialoadhesin binds sialic
	acids with its N-terminal IgV-domain, it is also a member of the SIGLEC family. The localization
	and expression of SIGLEC-1 in humans has altered coincident with the evolutionary loss of
	Neu5Gc. SIGLEC-1-positive macrophages have a dual physiologic function. They act as innate
	'flypaper' by preventing the systemic spread of lymph-borne pathogens and as critical
	gatekeepers at the lymph-tissue interface that facilitate the recognition of particulate antigens
	by B cells and initiate humoral immune responses.
	Synonyms: Sialoadhesin,Sheep erythrocyte receptor,SER,Sialic acid-binding Ig-like lectin
	1,Siglec-1,CD169,Siglec1,Sa, Sn,
	Full Gene Name: Sialoadhesin
	Cellular Localisation: Isoform 1: Cell membrane, Single-pass type I membrane protein.
Gene ID:	20612
UniProt:	Q62230
Application Details	
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well
	assay was recommended for both standard and sample testing.

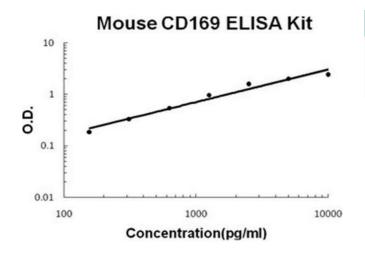
# **Application Details**

Comment:	Sequence similarities: Belongs to the immunoglobulin superfamily. SIGLEC (sialic acid binding
	lg-like lectin) family.
	Tissue Specificity: Detected in lymph node in the subcapsular sinus, interfollicular regions, and
	T and B-cell boundary (at protein level). Expressed by macrophages in various tissues. Highest
	expression in spleen and lymph node with lower amounts in lung, liver, bone marrow, heart and
	skin. No expression in thymus, kidney, brain or small intestine
Plate:	Pre-coated
Protocol:	mouse CD169 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent
	assay technology. A monoclonal antibody from rat specific for CD169 has been precoated onto
	96-well plates. Standards(NSO, T20-R1639) and test samples are added to the wells, a
	biotinylated detection polyclonal antibody from goat specific for CD169 is added subsequently
	and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was
	added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate
	TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a
	blue color product that changed into yellow after adding acidic stop solution. The density of
	yellow is proportional to the mouse CD169 amount of sample captured in plate.
	yellow is proportional to the mouse ob 100 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 10,000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL,
	312pg/mL, 156pg/mL mouse CD169 standard solutions into the precoated 96-well plate. Add
	0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each
	properly diluted sample of mouse cell culture supernates, serum or plasma(heparin, EDTA) to
	each empty well. See "Sample Dilution Guideline" above for details. It is recommended that
	each mouse CD169 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(ng/ml): 1.64, Standard deviation: 0.06, CV(%): 3.7
	<ul> <li>Sample 2: n=16, Mean(ng/ml): 4.85, Standard deviation: 0.204, CV(%): 4.2</li> </ul>
	• Sample 3: n=16, Mean(ng/ml): 6.88, Standard deviation: 0.316, CV(%): 4.6,
	• Sample 1: n=24, Mean(ng/ml): 2.54, Standard deviation: 0.119, CV(%): 4.7
	<ul> <li>Sample 2: n=24, Mean(ng/ml): 5.31, Standard deviation: 0.27, CV(%): 5.1</li> <li>Sample 3: n=24, Mean(ng/ml): 7.05, Standard deviation: 0.437, CV(%): 6.2</li> </ul>
Restrictions:	For Research Use only
Handling	
Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C

## Handling

Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

### **Images**



### **ELISA**

**Image 1.** Mouse CD169/SIGLEC-1 PicoKine ELISA Kit standard curve