

Datasheet for ABIN1889327  
**ICAM-3/CD50 ELISA Kit**[Go to Product page](#)**1** Image**1** Publication

## Overview

Quantity:	96 tests
Target:	ICAM-3/CD50 (ICAM3)
Binding Specificity:	AA 30-485
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	156-10000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

## Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human ICAM-3
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO, Q30-H485 Immunogen sequence: homodimer
Specificity:	Expression system for standard: NSO Immunogen sequence: Q30-H485 Immunogen sequence: homodimer

## Product Details

Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
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:	ICAM-3/CD50 (ICAM3)
Alternative Name:	ICAM3 ( <a href="#">ICAM3 Products</a> )
Background:	<p>Protein Function: ICAM proteins are ligands for the leukocyte adhesion protein LFA-1 (integrin alpha-L/beta-2). ICAM3 is also a ligand for integrin alpha-D/beta-2.</p> <p>Background: Intercellular adhesion molecule 3(ICAM3) also known as CD50(Cluster of Differentiation 50), is a human gene. The protein encoded by this gene is a member of the intercellular adhesion molecule(ICAM) family. ICAM3 is closely related to ICAM1, consists of 5 immunoglobulin domains, and binds LFA1 through its 2 N-terminal domains. This protein is constitutively and abundantly expressed by all leucocytes and may be the most important ligand for LFA-1 in the initiation of the immune response. It functions not only as an adhesion molecule, but also as a potent signalling molecule. ICAM3 has been shown to interact with EZR and Moesin.</p> <p>Synonyms: Intercellular adhesion molecule 3,ICAM-3,CDw50,ICAM-R,CD50,ICAM3,</p> <p>Full Gene Name: Intercellular adhesion molecule 3</p> <p>Cellular Localisation: Membrane, Single-pass type I membrane protein.</p>
Gene ID:	3385
UniProt:	<a href="#">P32942</a>

## 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.
Comment:	Sequence similarities: Belongs to the immunoglobulin superfamily. ICAM family.
Plate:	Pre-coated
Protocol:	human ICAM-3 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent

## Application Details

assay technology. A monoclonal antibody from mouse specific for ICAM-3 has been precoated onto 96-well plates. Standards(NSO, Q30-H485, homodimer) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for ICAM-3 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 human ICAM-3 amount of sample captured in plate.

**Assay Procedure:** Aliquot 0.1 mL per well of the 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL human ICAM-3 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 human cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human ICAM-3 standard solution and each sample be measured in duplicate.

**Assay Precision:**

- Sample 1: n=16, Mean(ng/ml): 0.58, Standard deviation: 0.021, CV(%): 3.7
- Sample 2: n=16, Mean(ng/ml): 2.73, Standard deviation: 0.123, CV(%): 4.5
- Sample 3: n=16, Mean(ng/ml): 5.45, Standard deviation: 0.294, CV(%): 5.4,
- Sample 1: n=24, Mean(ng/ml): 0.68, Standard deviation: 0.04, CV(%): 5.9
- Sample 2: n=24, Mean(ng/ml): 3.16, Standard deviation: 0.215, CV(%): 6.8
- Sample 3: n=24, Mean(ng/ml): 6.24, Standard deviation: 0.443, CV(%): 7.1

**Restrictions:** For Research Use only

## Handling

**Handling Advice:** Avoid multiple freeze-thaw cycles.

**Storage:** -20 °C, 4 °C

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

**Expiry Date:** 12 months

## Publications

**Product cited in:** Gong, Wang, Yuan, Li, Gu, Zhao, Zhang, Jia, Feng, Liu: "Inhibition of Tumor Growth and Immunomodulatory Effects of Flavonoids and Scutebarbatines of Scutellaria barbata D. Don in Lewis-Bearing C57BL/6 Mice." in: **Evidence-based complementary and alternative medicine : eCAM**, Vol. 2015, pp. 630760, (2015) ([PubMed](#)).

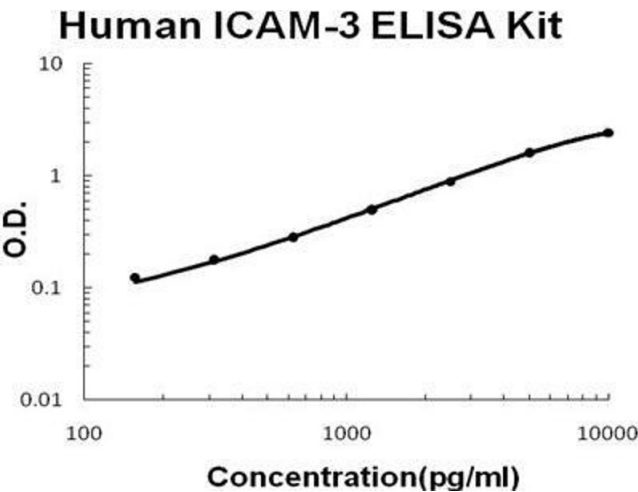
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Chen, Qi, Feng, Wang, Bao, Wang, Xiang, Xie: "Neuroprotective effect of allicin against traumatic brain injury via Akt/endothelial nitric oxide synthase pathway-mediated anti-inflammatory and anti-oxidative activities." in: **Neurochemistry international**, Vol. 68, pp. 28-37, (2014) ([PubMed](#)).

Li, Kong, Zhang, Yang: "Long-term intake of sesamin improves left ventricular remodelling in spontaneously hypertensive rats." in: **Food & function**, Vol. 4, Issue 3, pp. 453-60, (2013) ([PubMed](#)).

Li, Yang, Ma, Li, Tu, Gao et al.: "Fabrication of poly(lactide-co-glycolide) scaffold filled with fibrin gel, mesenchymal stem cells, and poly(ethylene oxide)-b-poly(L-lysine)/TGF- $\beta$ 1 plasmid DNA complexes for cartilage restoration in ..." in: **Journal of biomedical materials research. Part A**, Vol. 101, Issue 11, pp. 3097-108, (2013) ([PubMed](#)).

Images



ELISA

Image 1. Human ICAM-3 PicoKine ELISA Kit standard curve