

## Rat ICAM-1 / CD54 ELISA Kit | ICAM-1 / CD54 elisa kit

ICAM-1 / CD54 Rat ELISA Kit

|                              |                          |                              |
|------------------------------|--------------------------|------------------------------|
| CATALOG #<br><b>AAA58973</b> | REACTIVITY<br><b>Rat</b> | APPLICATIONS<br><b>ELISA</b> |
|------------------------------|--------------------------|------------------------------|

### PRODUCT SYNONYMS

ICAM-1 / CD54; ICAM-1 / CD54 Rat ELISA Kit; Rat ICAM-1 / CD54; ICAM-1 / CD54 elisa kit

### PRODUCT SPECIFICATIONS

|                                                     |                                                                             |
|-----------------------------------------------------|-----------------------------------------------------------------------------|
| Reactivity                                          | Rat                                                                         |
| Assay Type                                          | Sandwich                                                                    |
| Samples                                             | Rat serum, plasma, body fluids, tissue lysates or cell culture supernatants |
| Detection Range                                     | 31.2 pg/ml-2000 pg/ml                                                       |
| Sensitivity                                         | < 2 pg/ml                                                                   |
| Applicable Applications for ICAM-1 / CD54 elisa kit | ELISA                                                                       |
| Preparation and Storage                             | Store at 2-8 degree C for 4 months, or at -20 degree C for 8 months.        |

### IMAGES

**Typical Data & Standard Curve**  
Results of a typical standard run of a Rat ICAM-1 ELISA Kit are shown below. This standard curve was generated at our lab for demonstration purpose only. Each user should obtain their own standard curve as per experiment. (n/A=not applicable)

|   |       |       |       |       |       |       |       |       |       |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| X | Pg/ml | 0     | 31.2  | 62.5  | 125   | 250   | 500   | 1000  | 2000  |
| Y | OD450 | 0.078 | 0.116 | 0.157 | 0.233 | 0.386 | 0.644 | 1.177 | 2.383 |

Standard Curve (Sample)

### ADDITIONAL INFORMATION

#### Related Product Information for ICAM-1 / CD54 elisa kit

Background: ICAM-1 (Intercellular Adhesion Molecule 1) also known as CD54 (Cluster of Differentiation 54) is a cell surface glycoprotein which is typically expressed on endothelial cells and cells of the immune system. It binds to integrins of type CD11a / CD18, or CD11b / CD18 and is also exploited by rhinovirus as a receptor. ICAM-1 is a member of the immunoglobulin superfamily, it can be induced by interleukin-1 (IL-1) and tumor necrosis factor alpha (TNFalpha) and is expressed by the vascular endothelium, macrophages, and lymphocytes. It is also an endothelial- and leukocyte-associated transmembrane protein long known for its importance in stabilizing cell-cell interactions and facilitating leukocyte endothelial transmigration. More recently, ICAM-1 has been characterized as a site for the cellular entry of human rhinovirus.

Principle of the Assay: This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-ICAM-1 polyclonal antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-ICAM-1 polyclonal antibody was used as detection antibodies. The standards, test samples and biotin conjugated detection antibody were added to the wells subsequently, and wash with wash buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with wash buffer. TMB substrates were 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 ICAM-1 amount of sample captured in plate. Read the O.D. absorbance at 450nm in a microplate reader, and then the concentration of ICAM-1 can be calculated.

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                  |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 167466198                                                                                                                                                                        |
| NCBI GeneID                      | 3383                                                                                                                                                                             |
| NCBI Accession #                 | NP_000192.2                                                                                                                                                                      |
| NCBI GenBank Nucleotide #        | NM_000201.2                                                                                                                                                                      |
| UniProt Accession #              | P05362; Q5NKV7; Q96B50; B2R6M3                                                                                                                                                   |
| Molecular Weight                 | 57,825 Da                                                                                                                                                                        |
| NCBI Official Full Name          | intercellular adhesion molecule 1                                                                                                                                                |
| NCBI Official Synonym Full Names | intercellular adhesion molecule 1                                                                                                                                                |
| NCBI Official Symbol             | ICAM1                                                                                                                                                                            |
| NCBI Official Synonym Symbols    | BB2; CD54; P3.58                                                                                                                                                                 |
| NCBI Protein Information         | intercellular adhesion molecule 1; ICAM-1; cell surface glycoprotein P3.58; major group rhinovirus receptor; intercellular adhesion molecule 1 (CD54), human rhinovirus receptor |
| UniProt Protein Name             | Intercellular adhesion molecule 1                                                                                                                                                |
| UniProt Gene Name                | ICAM1                                                                                                                                                                            |
| UniProt Synonym Gene Names       | ICAM-1                                                                                                                                                                           |
| UniProt Entry Name               | ICAM1_HUMAN                                                                                                                                                                      |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/rat-elisa-kits/icam-1-cd54/58973>