

# Rabbit Anti-ICAM1/CD54 antibody

# SL0608R

Product Name:	ICAM1/CD54
Chinese Name:	细胞间粘附分子-1抗体
Alias:	BB2; CD54 antigen;ICAM 1; ICAM-1; Cell surface glycoprotein P3.58; Human rhinovirus receptor; Intercellular adhesion molecule 1; Major group rhinovirus receptor; MALA2; MyD10; P3.58; Surface antigen of activated B cells; ICAM1_HUMAN; MALA-2; MyD10; intercellular adhesion molecule 1 precursor; intercellular adhesion molecule 1 (CD54), human rhinovirus receptor; major group rhinovirus receptor.
	Specific References(11) SL0608R has been referenced in 11 publications.
	[IF=2.02]Chu, Changbin, et al. "Celastrol protects kidney against ischemia-reperfusion-
	induced injury in rats." Journal of Surgical Research (2013).IHC-P;Rat.
	<u>PubMed:23981709</u>
	[IF=2.59]Park, Sumin, et al. "Protective effect of 7-O-succinyl macrolactin A against
	intestinal inflammation is mediated through PI3-kinase/Akt/mTOR and NF-κB signaling
文献引用 文献引用	pathways." European Journal of Pharmacology (2014). WB;Rat.
Pub Med	PubMed:24769511
	[IF=3.55]Xiong, H., et al. "Glycyrrhizin Ameliorates Imiquimod-Induced Psoriasis-like
	Skin Lesions in BALB/c Mice and Inhibits TNF-α-Induced ICAM-1 Expression via NF-
	κB/MAPK in HaCaT Cells." Cellular Physiology and Biochemistry 35.4 (2015): 1335-
	1346.IHC-P;Mouse.
	PubMed:25720416
	[IF=3.23]Chenna Narendra S, Chalise JP, Magnusson M, Uppugunduri S (2015) Local
	but Not Systemic Administration of Uridine Prevents Development of Antigen-Induced
	Arthritis. PLoS ONE 10(10): e0141863IHC-P;Mouse.

#### PubMed:26512984

[IF=1.93]Tang, Li-Qin, et al. "The renoprotective effects of berberine and its potential impact on the expression of β-arrestins and ICAM-1/VCAM-1 in streptozocin induced-diabetic nephropathy rats." Journal of Diabetes (2015).other;

#### PubMed:26531813

[IF=1.28] Ji, Mingli, et al. "Up-regulation of ICAM-1mRNA and IL-1βmRNA in lung tissues of a rat model of COPD." International Journal of Clinical and Experimental Medicine 8.11 (2016): 21956-21963. IHC-P;Rat.

#### PubMed:26885167

[IF=0.00]Sumarya, Made, et al. "BETEL LEAF EXTRACTS (PIPER BETLE L.)
PREVENT ENDOTHELIAL DYSFUNCTION BY REDUCING THE LEVELS OF
URIC ACID AND ICAM-1 EXPRESSION OF THE HYPERURICEMIA WISTAR
RATS (RATTUS NORVEGICUS) AORTIC ENDOTHELIAL." Indonesia Journal of
Biomedical ScienceIHC-P;Rat.

#### PubMed:0

[IF=1.27] Ji, Mingli, et al. "Protective effect of Xuebijing injection against acute lung injury induced by left ventricular ischemia/reperfusion in rabbits." Experimental and Therapeutic Medicine 12.1 (2016): 51-58. IHC-P; Rabbit.

#### PubMed:27347017

[IF=1.66]Zhang, Xiaomei, et al. "Effect of mild hypothermia on breast cancer cells adhesion and migration." Bioscience Trends 6.6 (2012): 313-324.other;

#### PubMed:23337791

[IF=0.52]Utomo, Pamudji, et al. "Decreasing SDF1-CXCR4 Expression after Adipose-Derived Mesenchymal Stem Cells (ASCS) Treatment Combined with Freeze-Dried Amniotic Membrane Wrapping in Rat Sciatic Nerve Injury." International Journal of ChemTech Research.IF(ICC);Rat.

#### PubMed:0

[IF=3.21]Osada-Oka, Mayuko, et al. "Macrophage-derived exosomes induce inflammatory factors in endothelial cells under hypertensive conditions." Hypertension Research (2016). WB;Rat.

#### PubMed:27881852

Organism Species:	Rabbit
Clonality:	Polyclonal

Human, Mouse, Rat,
WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-
Cyt=1µg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.
56kDa
The cell membrane
Lyophilized or Liquid
1mg/ml
KLH conjugated synthetic peptide derived from human CD54:201-
300/537 <extracellular></extracellular>
IgG
affinity purified by Protein A
0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
antibody is stable at room temperature for at least one month and for greater than a year
when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed  This game are added a call symfolic place to the protein which is typically symposised an
This gene encodes 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. [provided by
RefSeq, Jul 2008].
recised, var 2000].
Function:
ICAM proteins are ligands for the leukocyte adhesion protein LFA-1 (integrin alpha-
L/beta-2). During leukocyte trans-endothelial migration, ICAM1 engagement promotes
the assembly of endothelial apical cups through ARHGEF26/SGEF and RHOG
activation. In case of rhinovirus infection acts as a cellular receptor for the virus.
Subunit:
Homodimer (Probable). Interacts with human herpesvirus 8 MIR2 protein (Probable).
Interacts with MUC1 and promotes cell aggregation in epithelial cells. Interacts with ARHGEF26/SGEF. Binds to coxsackievirus A21 capsid proteins and acts as a receptor
for this virus.
ioi uns virus.
Subcellular Location:
Membrane; Single-pass type I membrane protein.
Post-translational modifications:
Monoubiquitinated, which is promoted by MARCH9 and leads to endocytosis.
Similarity:
Belongs to the immunoglobulin superfamily. ICAM family. ontains 5 Ig-like C2-type (immunoglobulin-like) domains.

**SWISS:** 

P13597

Gene ID:

3383

Database links:

Entrez Gene: 3383Human

Entrez Gene: 15894Mouse

Entrez Gene: 25464Rat

Omim: 147840Human

Unigene: 643447Human

SwissProt: P05362Human

SwissProt: P13597Mouse

SwissProt: Q00238Rat

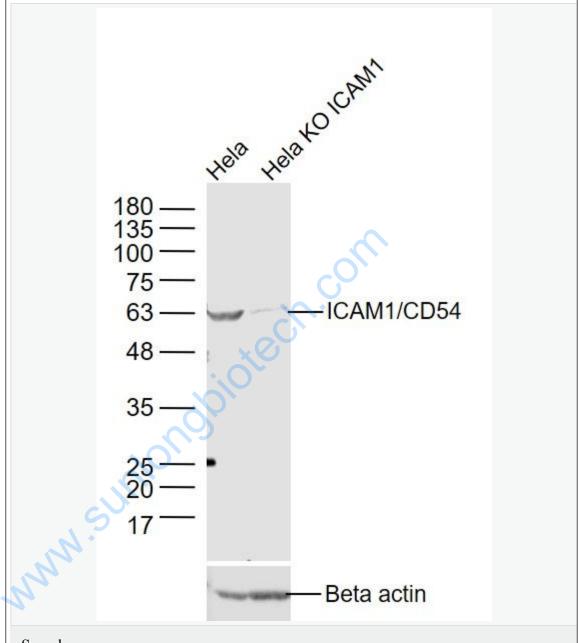
Unigene: 435508Mouse

Unigene: 12Rat

#### **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

CD54(ICAM-1)是分子量为60-110KD的膜型glycoprotein, 表达于单核和endothelial cells。许多细胞如B或Tlymphocyte、胸腺细胞、纤维母细胞和epithelial cells都可诱导表达CD54, 在调节免疫和炎症反应中CD54有重要作用。



Picture:

Sample:

Hela(Human) Cell Lysate at 30 ug

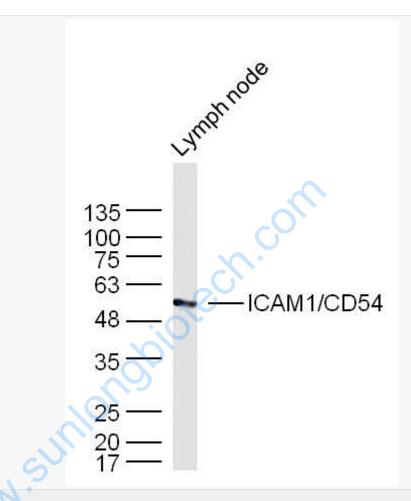
Hela KO ICAM1 (Human) Cell Lysate at 30 ug

Primary: Anti-ICAM1/CD54 (SL0608R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 56 kD

Observed band size: 56 kD



### Sample:

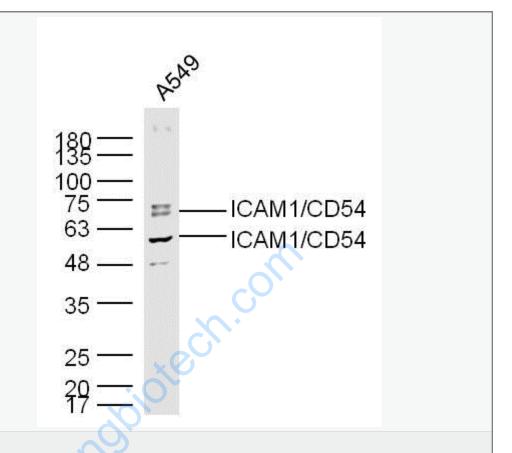
Lymph node (Mouse) Lysate at 40 ug

Primary: Anti-ICAM1 (SL0608R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 56 kD

Observed band size: 56 kD



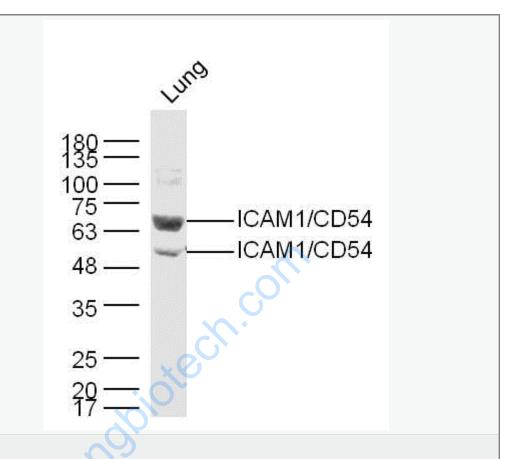
A549(Human) Cell Lysate at 30 ug

Primary: Anti-ICAM1 (SL0608R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 56 kD

Observed band size: 56/69 kD



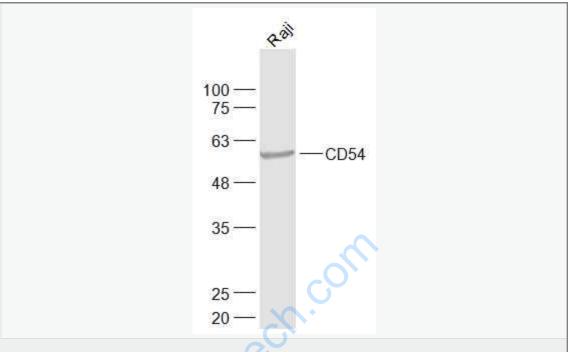
Lung (Mouse) Lysate at 40 ug

Primary: Anti-ICAM1 (SL0608R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 56 kD

Observed band size: 56/69 kD



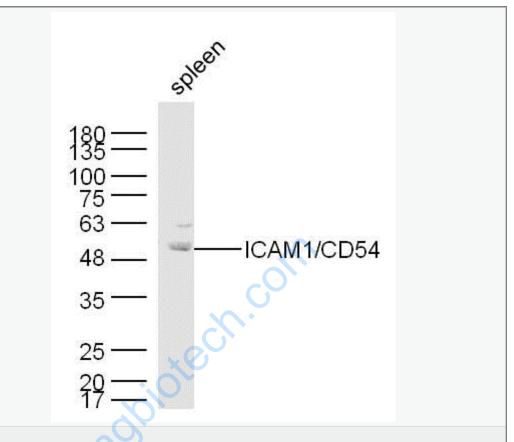
Raji(Human) Cell Lysate at 30 ug

Primary: Anti-CD54 (SL0608R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 56 kD

Observed band size: 56 kD



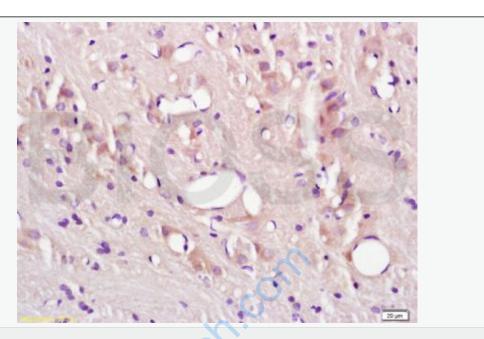
Spleen (Mouse) Lysate at 40 ug

Primary: Anti-ICAM1 (SL0608R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

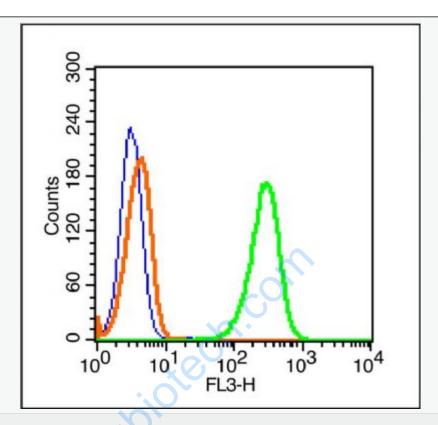
Predicted band size: 56 kD

Observed band size: 56/69 kD



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-CD54/ICAM-1 Polyclonal Antibody, Unconjugated(SL0608R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control (blue line): A431 cells(blue).

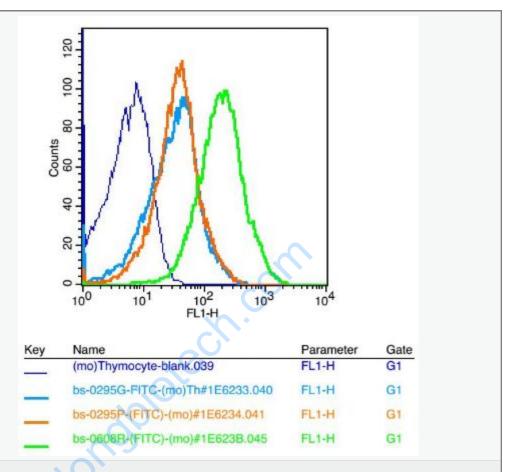
Primary Antibody (green line): Rabbit Anti-ICAM1/PE-CY7 Conjugated antibody (SL0608R)

Dilution: 1µg/10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG-PE-CY7.

### Protocol

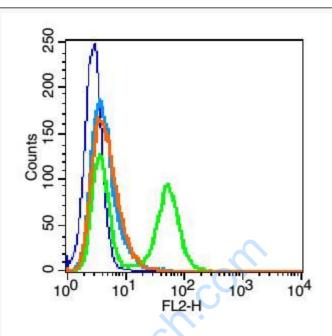
The cells were fixed with 70% ice-cold methanol overnight at 4°C. The cells were then incubated in 1 X PBS/2%BSA/10% goat serum to block non-specific protein-protein interactions followed by the antibody for 15 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. Acquisition of 20,000 events was performed.



Blank control: mouse thymouses(blue)

 $Isotype\ Control\ Antibody:\ Rabbit\ IgG(orange)\ ;\ Secondary\ Antibody:\ Goat\ anti-rabbit\ IgG-FITC(white\ blue),\ Dilution:\ 1:100\ in\ 1\ X\ PBS\ containing\ 0.5\%\ BSA\ ;$ 

Primary Antibody Dilution: 1µg in 100 µL 1X PBS containing 0.5% BSA(green).



Blank control: HUVEC cells(blue).

Primary Antibody:Rabbit Anti-CD54 antibody(SL0608R), Dilution: 1 $\mu$ g in 100  $\mu$ L 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions ); Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

### Protocol

The cells were fixed with 2% paraformaldehyde (10 min) .Primary antibody (SL0608R) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.

www.sunlondbiotech.com