

## ARG30035 Phospho CD54 / ICAM1 Antibody Duo (Total, pY512)

Package: 1 pair  
Store at: -20°C

### Component

Cat. No.	Component Name	Host clonality	Reactivity	Application	Package
ARG62887	anti-CD54 / ICAM1 antibody [MEM-111]	Mouse mAb	Hu, Rat, Bov	ELISA, FACS, ICC/IF, IHC-Fr, IHC-P, WB	50 µg
ARG51586	anti-CD54 / ICAM1 phospho (Tyr512) antibody	Rabbit pAb	Hu	WB	50 µl

### Summary

<b>Product Description</b>	Cytokines such as Tumor Necrosis Factor- $\alpha$ (TNF- $\alpha$ ) increase the expression of Intercellular Adhesion Molecule-1 (ICAM-1), a cell surface receptor required for leukocyte adhesion and tumor invasion, in the H838 non-small cell lung cancer cell line. ICAM-1 also facilitates tumor cell extravasation via the binding of neutrophils. TNF- $\alpha$ is known to induce activation of Src protein tyrosine kinase, which functions as a regulator of endothelial permeability. Src mediated phosphorylation of ICAM-1 is necessary for neutrophil adhesion to the endothelium during acute lung inflammation and injury, a process considered to induce vascular hyperpermeability. Additionally, Src is involved in signaling epithelial-to-mesenchymal transformation and extravasation of cancer cells, processes that are necessary for solid tumor metastasis. <a href="#">[Tobias Piegeler et al., 2012; PMID:22846676]</a> To study the function and the signaling cascade of ICAM1, not only should identify the amount of not only in total ICAM1 but also pY512 phosphorylated ICAM1. ARG30035, ICAM1 phospho Duos (Total, pY512), including antibodies recognize total ICAM1 and pY512 phosphorylated ICAM1 is designed for user in ICAM1 related study.
<b>Target Name</b>	CD54 / ICAM1
<b>Alternate Names</b>	Phospho CD54 / ICAM1 antibody; Phospho Intercellular adhesion molecule 1 antibody; Phospho ICAM1 antibody; CD54 / ICAM1 phospho (Tyr512) antibody; CD54 / ICAM1 antibody

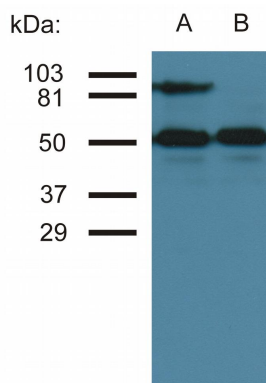
### Properties

<b>Storage instruction</b>	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
<b>Note</b>	For laboratory research only, not for drug, diagnostic or other use.

### Bioinformation

<b>Gene Symbol</b>	ICAM1
<b>Gene Full Name</b>	Phospho Intercellular adhesion molecule 1 (ICAM1) Antibody Duo (Total, pY512)
<b>Background</b>	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]
<b>Function</b>	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 (By similarity). [UniProt]

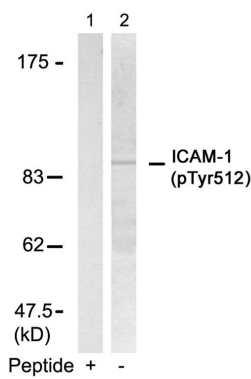
Images



ARG62887 anti-CD54 / ICAM1 antibody [MEM-111] WB image

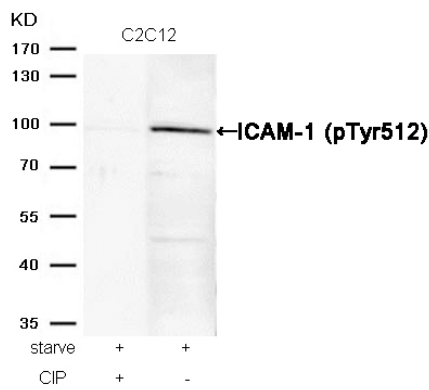
Western blot: 1. TNF-alpha activated HUVEC cell lysate, 2. HUVEC cell lysate stained with ARG62887 anti-CD54 / ICAM1 antibody [MEM-111].

Lower bands represent tubulin as a loading control.



ARG51586 anti-CD54 / ICAM1 phospho (Tyr512) antibody WB image

Western blot: Extracts from HUVEC cells stained with ARG51586 anti-CD54 / ICAM1 phospho (Tyr512) antibody (Lane 2) and the same antibody preincubated with blocking peptide (Lane1).



ARG51586 anti-CD54 / ICAM1 phospho (Tyr512) antibody WB image

Western blot: Extracts from C2C12 cells, treated with starve or calf intestinal phosphatase (CIP), stained with ARG51586 anti-CD54 / ICAM1 phospho (Tyr512) antibody.