

Datasheet: VPA00014

**BATCH NUMBER 090714**

<b>Description:</b>	RABBIT ANTI CD54
<b>Specificity:</b>	CD54
<b>Other names:</b>	ICAM-1
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb Polyclonal
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	100 µl

## Product Details

### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	▪			1/1000

**The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range.** Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Rabbit polyclonal antibody purified by affinity chromatography
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Immunogen</b>	Recombinant human CD54
<b>External Database Links</b>	<b>UniProt:</b>

**Entrez Gene:**

[3383](#) ICAM1 [Related reagents](#)

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<b>Specificity</b>	<p><b>Rabbit anti Human CD54 antibody</b> recognizes human CD54, otherwise known as intercellular adhesion molecule 1 or ICAM-1. CD54 is a 532 amino acid single pass type I membrane glycoprotein containing five <a href="#">Ig-like C2-type domains</a>. CD54 is widely expressed and acts as a ligand for the leukocyte integrin LFA-1 (CD11a/CD18) and Mac-1 integrins, it is the major receptor for human rhinovirus (<a href="#">Staunton et al. 1989</a>).</p> <p>CD54 is highly expressed on activated endothelial cells (<a href="#">Favoloro 1993</a>) and plays a role in transendothelial cell migration to sites of acute inflammation, functioning primarily as an adhesion molecule between endothelial cells and leucocytes, following injury or stress (<a href="#">Manes and Pober 2011</a>). Levels of soluble CD54 in serum (<a href="#">Matalliotakis et al. 2001</a>) or urine (<a href="#">Kim et al. 2006</a>) can be potentially used as an indication of infection, inflammation and certain tumors, and as a target for immunosuppression in transplantation.</p> <p>Rabbit anti Human CD54 antibody recognizes human CD54 as a single band of ~92 kDa in Raji cell line lysates by western blotting under reducing conditions.</p>
<b>Western Blotting</b>	Anti CD54 antibody detects a band of approximately 92 kDa in Raji cell lysates.
<b>References</b>	<ol style="list-style-type: none"><li>1. Nadlonek, N.A. <i>et al.</i> (2012) Radiation induces osteogenesis in human aortic valve interstitial cells. <a href="#">J Thorac Cardiovasc Surg. 144 (6): 1466-70.</a></li><li>2. Watson, R.L. <i>et al.</i> (2015) Endothelial CD99 signals through soluble adenylyl cyclase and PKA to regulate leukocyte transendothelial migration. <a href="#">J Exp Med. 212 (7): 1021-41.</a></li></ol>
<b>Storage</b>	Store undiluted at -20°C, avoiding repeated freeze thaw cycles.
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	PrecisionAb is a trademark of Bio-Rad Laboratories.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/VPA00014">https://www.bio-rad-antibodies.com/SDS/VPA00014</a> Antibody (10040)
<b>Regulatory</b>	For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Rabbit IgG (H/L) (STAR208...) [HRP](#)

**North & South America**   Tel: +1 800 265 7376  
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
'M370440:200529'

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