

## Datasheet: AHP2183

<b>Description:</b>	RABBIT ANTI HUMAN CD54
<b>Specificity:</b>	CD54
<b>Other names:</b>	ICAM-1
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	0.1 mg

## 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
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin (1)	▪			
ELISA	▪			0.5 - 2.0ug/ml
Immunoprecipitation			▪	
Western Blotting	▪			0.1 - 0.2ug/ml

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

**(1) This product requires enzyme mediated antigen retrieval prior to staining of paraffin sections. Proteinase K is recommended for this purpose.**

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - lyophilised
<b>Reconstitution</b>	Reconstitute with 0.1ml distilled water Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. Bio-Rad recommend that the vial is gently mixed after reconstitution. For long term storage the addition of 0.09% sodium azide is recommended.

**Antiserum Preparation** Antiserum to human CD54 was raised by repeated immunisation of rabbits with highly purified antigen. Purified IgG was prepared by affinity chromatography.

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	None present
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml after reconstitution
<b>Immunogen</b>	<a href="#">Recombinant human CD54.</a>
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P05362</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3383</a> ICAM1    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_10841624
<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 tumour, and as a target for immunosuppression in transplantation.</p>
<b>ELISA</b>	This purified human CD54 antibody may be used in an indirect ELISA or as the capture reagent in a sandwich ELISA with our <a href="#">biotinylated human CD54 antibody</a> (AHP2183B) as the detection reagent and <a href="#">recombinant human CD54</a> (PHP250) as the standard
<b>References</b>	<ol style="list-style-type: none"> <li>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>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>	<p>Prior to reconstitution store at -20°C.  After reconstitution store at -20°C.</p> <p>This product should be stored undiluted. Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>

<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10162 available at: 10162: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

- Sheep Anti Rabbit IgG (STAR34...) [FITC](#)
- Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)
- Sheep Anti Rabbit IgG (STAR35...) [RPE](#)
- Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)
- Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®680](#), [DyLight®800](#)

### Recommended Useful Reagents

- [ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025A\)](#)
- [100x ANTIGEN RETRIEVAL BUFFER, pH8.0 \(BUF025C\)](#)
- [TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

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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://www.bio-rad-antibodies.com/datasheets)  
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