

## Product datasheet for **BM4050**

### ICAM1 Mouse Monoclonal Antibody [Clone ID: 1304]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	1304
Applications:	FC, IHC, WB
Recommended Dilution:	<b>Immunohistochemistry on Frozen Sections:</b> 0.25 µg/ml (1/800). <b>Immunohistochemistry on Paraffin Sections:</b> 2 µg/ml (1/100). Pretreatment for antigen retrieval is recommended. Has been described to work in <b>FACS</b> and <b>Western Blots</b> .
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Cultured Human endothelial cells.
Specificity:	<p>Clone 1304 detects CD54 (ICAM 1) and is useful for the detection of activated endothelial cells and other activated hemopoietic cells. The antibody inhibits the binding of NK-cells to target cells (K562). Intercellular adhesion molecule (ICAM) 1 or CD54 was initially identified with monoclonal antibody RR1/1 as a widely distributed, cytokine-inducible counter-receptor for lymphocyte-function-associated antigen (LFA) 1 (CD11a/CD18). Granulomas (macrophages/epitheloid cells) in inflamed colon from Crohn's disease and follicular dendritic cells in the tonsil from chronic tonsillitis are strongly positive for CD54 antigen. Also, CD54 is found on activated CD56+/CD3- natural killer cells.</p> <p>Clone 1304 stains a 95kD single chain integral membrane glycoprotein. The epitope is stable against acetone or paraformaldehyde fixation. ICAM 1 also functions as a rhinovirus receptor. The antibody recognizes an epitope on domain 1 of the molecule as tested on transfectants.</p> <p>In inflamed lesions the antibody reacts with stimulated endothelial cells, epithelial cells and fibroblasts and with hemopoietic cells such as macrophages, dendritic cells in Peyer's patches, lymph nodes and tonsils.</p> <p>ICAM 1 expression can be induced on endothelial cells by in vitro stimulation with IL-1, TNFα and IFNγ.</p>



[View online »](#)

<b>Formulation:</b>	PBS pH 7.2 with 10 mg/ml BSA as a stabilizer and 0.01% Thimerosal as a preservative State: Purified State: Lyophilized purified Ig fraction
<b>Reconstitution Method:</b>	Restore with 0.5 ml distilled water.
<b>Concentration:</b>	0.2 mg/ml (after reconstitution)
<b>Purification:</b>	Protein A Chromatography
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store the antibody at 2-8°C for one month or (in aliquots) at -20°C for longer. Do not freeze working dilutions. Avoid repeated freezing and thawing.
<b>Stability:</b>	Shelf life: One year from despatch.
<b>Gene Name:</b>	intercellular adhesion molecule 1
<b>Database Link:</b>	<a href="#">Entrez Gene 3383 Human P05362</a>
<b>Background:</b>	ICAM1 is a 85-110 kDa single chain type 1 integral membrane glycoprotein with an extracellular domain of five immunoglobulin superfamily repeats, a transmembrane region and a cytoplasmic domain. It shares considerable amino acid sequence homology with ICAM3 and with ICAM2. ICAM1 is expressed by activated endothelial cells. It is detected on cells of many other lineages (e.g. epithelial cells, fibroblasts, chondrocytes, B lymphocytes, T lymphocytes (low), monocytes, macrophages, dendritic cells and neutrophils), with lower levels that increase in inflammation. ICAM1 is also detected in some carcinoma and melanoma cells. Soluble ICAM1 is detectable in the plasma and is elevated in patients with various inflammatory syndromes. It is the receptor for rhinoviruses and malaria.
<b>Synonyms:</b>	ICAM-1

- Note:**
- Protocol: **Protocol with frozen, ice-cold acetone-fixed sections:**
- The whole procedure is performed at room temperature
1. Wash in PBS
  2. Block endogenous peroxidase
  3. Wash in PBS
  4. Block with 10% normal goat serum in PBS for 30min. in a humid chamber
  5. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber
  6. Wash in PBS
  7. Incubate with secondary antibody (peroxidase-conjugated goat anti mouse IgG+IgM (H+L) minimal-cross reaction to human) for 1h in a humid chamber
  8. Wash in PBS
  9. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.
  10. Wash in PBS
  11. Counterstain with Mayer's hemalum
- Protocol with formalin-fixed, paraffin-embedded sections:**
- The whole procedure is performed at room temperature
1. Deparaffinize and rehydrate tissue section
  2. Incubate the tissue section with proteinase K for 7min.
  3. Wash in distilled water
  4. Block endogenous peroxidase
  5. Wash in PBS
  6. Block with 10% normal goat serum in PBS for 30min. in a humid chamber
  7. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber
  8. Wash in PBS
  9. Incubate with secondary antibody (peroxidase-conjugated goat anti mouse IgG+IgM (H+L) minimal-cross reaction to human) for 1h in a humid chamber
  10. Wash in PBS
  11. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.
  12. Wash in PBS
  13. Counterstain with Mayer's hemalum