

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human AIF-1/Iba1 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 603102
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human AIF-1/Iba1 Met1-Pro147 Accession # P55008
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below

## DATA

### Immunohistochemistry



#### AIF-1/Iba1 in Human Colon.

AIF-1/Iba1 was detected in immersion fixed paraffin-embedded sections of human colon using Mouse Anti-Human AIF-1/Iba1 Monoclonal Antibody (Catalog # MAB7308) at 5 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei of epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Allograft-inflammatory factor 1 (AIF-1), also known as daintain and Iba1, is a 17 kDa cytoplasmic protein that contains two calcium-binding EF hand motifs (aa 45-80 and aa 81-115). AIF-1 is expressed in activated macrophages and is important for the proinflammatory response to ischemia, tissue injury, and atherosclerosis. It is also expressed in vascular smooth muscle and endothelial cells in these areas where it promotes vascular remodeling and new vessel formation. AIF-1 is upregulated in allografted tissue during transplant rejection. It also promotes the proliferation of breast cancer cells and in vivo tumorigenesis. The 147 amino acid (aa) isoform 3 of human AIF-1 shares 89% aa sequence identity with mouse and rat AIF-1. Isoform 1 of human AIF-1 lacks the N-terminal 54 aa of isoform 3. Isoform 2 lacks aa 1-54 as well as aa 121-147 but also has a 66 aa insertion at position 65.