

**DESCRIPTION**

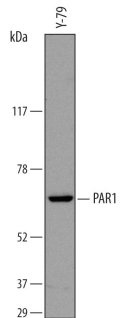
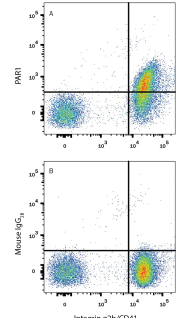
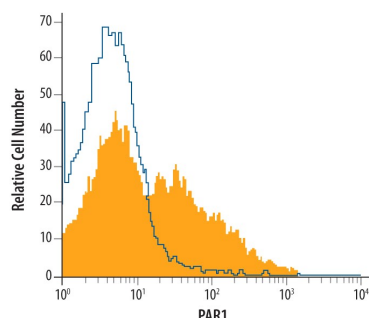
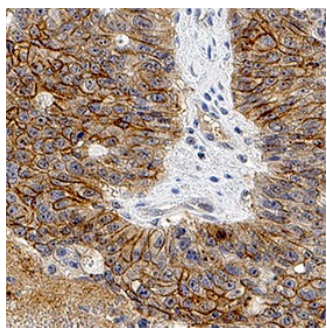
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human PAR1 in direct ELISAs and Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 731115
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PAR1 Arg27-Thr102, Ser375-Thr425 Accession # P25116
<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 either lyophilized or 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	2 µg/mL	See Below
<b>Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	See Below
<b>Immunohistochemistry</b>	5-25 µg/mL	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

**DATA**

<p><b>Western Blot</b></p>  <p><b>Detection of Human PAR1 by Western Blot.</b> Western blot shows lysates of Y-79 human retinoblastoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human PAR1 Monoclonal Antibody (Catalog # MAB3855) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for PAR1 at approximately 65 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Flow Cytometry</b></p>  <p><b>Detection of PAR1 in Human Peripheral Blood Platelets by Flow Cytometry.</b> Human peripheral blood platelets were stained with Mouse Anti-Human Integrin α2b/CD41 PE-conjugated Monoclonal Antibody (Catalog # FAB7616P) and either (A) Mouse Anti-Human PAR1 Monoclonal Antibody (Catalog # MAB3855) or (B) Mouse IgG<sub>2B</sub> Flow Cytometry Isotype Control (Catalog # MAB0041) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B).</p>
<p><b>Flow Cytometry</b></p>  <p><b>Detection of PAR1 in HT-29 Human Cell Line by Flow Cytometry.</b> HT-29 human colon adenocarcinoma cell line was stained with Mouse Anti-Human PAR1 Monoclonal Antibody (Catalog # MAB3855, filled histogram) or isotype control antibody (Catalog # MAB0041, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B).</p>	<p><b>Immunohistochemistry</b></p>  <p><b>PAR1 in Human Colon Cancer Tissue.</b> PAR1 was detected in immersion fixed paraffin-embedded sections of human colon cancer tissue using Mouse Anti-Human PAR1 Monoclonal Antibody (Catalog # MAB3855) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to plasma membrane in cancer cells. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.</p>

**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>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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**

Human Proteinase-Activated Receptor 1 (hPAR1), also known as thrombin receptor, is a 65-70 kDa, 399 amino acid long member of the seven-transmembrane superfamily of cell-surface G protein-coupled receptors. PAR1 is activated by thrombin cleavage of its N-terminal propeptide in the extracellular domain. Human PAR1 is widely expressed in many cell types including endothelial cells, and it has been implicated in a variety of inflammatory responses. Over the regions used as immunogen, human and mouse PAR1 proteins are 58% identical in the region spanning the propeptide and extracellular domains, and 84% identical in the cytoplasmic tail.