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| --- | --- |
| Clone | EP178 |
| Source | Rabbit Monoclonal |
| Cat # | PR249-6ml RTU PR249-3ml RTU  CR249-0.1ml Conc CR249-0.5ml Conc HAR249-6ml RTU HAR249-3ml RTU |
| Regulatory Status | IVD |

CD41- (EP178)

**Intended Use:**

This antibody is intended for use to qualitatively identify CD41 antigen by light microscopy in formalin fixed, paraffin embedded tissue sections using immunohistochemical detection methodology. Interpretation of any positive or negative staining must be complemented with the evaluation of proper controls and must be made within the context of the patient’s clinical history and other diagnostic tests. A qualified pathologist must perform evaluation of the test.

**Summary and Explanation:**   
  
CD41, also named GP IIb, is a protein that in human is encoded by the ITGA2B gene. This protein can be associated with GPIIIa to form a heterodimer complex (GPIIb-IIIa) in the presence of Ca2+. This complex can bind one of four different adhesive proteins (i.e,fibrinogen,fibronectin,,von Willebrand factor [Vwf], or vitronectin).

CD41 expression has been found on platelets, megakaryocytes, and, more recently, on immature hematopoietic progenitors. CD41 is a reliable marker of early steps of hematopoiesis during ES cell differentiation. CD41 has been used as a marker for megakaryocytic differentiation.

**Isotype:** Rabbit IgG

**Immunogen:** A synthetic peptide corresponding to residues of human CD41/Integrin protein

**Reagent Provided:**

**Concentrated format:** Antibody to CD41 is diluted in antibody diluent, with 1% bovine   
 serum albumin (BSA) and 0.05% sodium azide (NaN3). Recommended   
 dilutions: 1:50 – 1:100.The antibody dilution and protocol may vary depending on   
 the specimen preparation and specific application. Optimal conditions should be   
 determined by individual laboratory.

**Pre-diluted format:** PathnSitu ready to use antibodies are pre tittered to optimal staining   
 conditions. Further dilution may loose the activity and may yield to sub optimal   
 staining.

**Storage Recommendations:** Store at 2°-8°C. Do not use after expiration date provided on the vial.

**Staining Recommendations:   
 Antigen Retrieval Solution:** Use **Tris-EDTA (PathnSitu Cat # PS009)** as antigen retrieval solution   
 Heat Retrieval Method: Retrieve sections under steam pressure for 15min   
 using PathnSitu’s MERS (Multi Epitope Retrieval System) then allow   
 solution to cool for 10 minutes then transfer tissue sections/slides to   
 distilled water.

**Primary Antibody:**  Cover the tissue sections with primary antibody and incubate for 30   
 min at room temperature when used PathnSitu PolyExcel Detection   
 System.

**Detection System:** Refer to PathnSitu PolyExcel detection system protocol or manufacturer’s detection kit staining protocol when used other vendor detection system.

**Cellular Localization:** Membrane/Cytoplasmic

**Positive Control:** Spleen

**Troubleshooting:** Follow the antibody specific protocol recommendations according to data sheet provided. If unusual results occur, contact PathnSitu Technical Support at 040-2701 5544 or techsupport@pathnsitu.com.

**Limitations and Warranty:** There are no warranties, expressed or implied, which extend beyond this   
 description. PathnSitu is not liable for property damage, personal injury, or   
 economic loss caused by this product.

**Bibliography:**  1. Parise LV, et al.: J Biol Chem 1985, 260:1750-1756   
 2. Berlanga O, et al.: Exp Hematol 2005, 33:403-412   
 3. Debili N, et al.: Blood 2001, 97:2023-2030   
 4. Mitjavila-Garcia MT, et al.: Development 2002, 129:2003-2013   
 5. Karandikar NJ, et al.: Am J Clin Pathol 2001, 116:204-210

**CD41, EP178 antibody has been created by Epitomics Inc., using Epitomics’ proprietary rabbit monoclonal antibody technology covered under Patent No.’s 5,675,063 and 7,402,409.**