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| Clone | EP190 |
| Source | Rabbit Monoclonal |
| Cat # | PR112-6ml RTU PR112-3ml RTU CR112-0.1ml Conc CR112-0.5ml Conc HAR112-6ml RTU HAR112-3ml RTU |
| Regulatory Status | IVD |

MUM1(EP-190)

**Intended Use:**

This antibody is intended for use to qualitatively identify IRF4 (MUM1) 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:**

MUM1 (multiple myeloma oncogene-1, also called IRF4), a member of the IRF family transcriptional factors, is induced by antigen receptor mediated stimuli and plays a crucial role in cell proliferation, differentiation and survival.

In the hematolymphoid system, MUM1 is primarily expressed in B- cells and actived T-lymphoid cells. In B-cells it is expressed on a small subset of germinal center (GC) cells committed to plasmacytic or memory cell differentiation in the “light zone” and in plasma cells.

MUM1 has been identified as a marker of non-germinal center- derived DLBCL, a subtype also associated with more aggressive clinical behavior and poor prognosis, but absent in mantle cell lymphoma (pre-GC B-cells) and in follicular lymphoma (GC B-cells). MUM1 may be a potential histo-genetic marker for B-cell lymphomas. Additionally, MUM1 is a useful marker for Reed- Sternberg (HRS) cells in Hodgkin’s lymphoma.

**Immunogen:** A synthetic peptide corresponding to residues of human IRF4 (MUM1) protein.

**Isotype:** Rabbit IgG

**Reagent Provided:   
 Concentrated format:** Antibody to MUM1 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 **EDTA Buffer** **(PathnSitu Cat # PS008)** as antigen retrieval solution   
 Heat Retrieval Method: Retrieve sections under steam pressure for 20   
 min 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 **60**   
 **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:** Nuclear/Cytoplasm

**Positive Control:** Tonsil, Plasmacytoma

**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. Grossman A*, et al.*: *Genomics* 1996, 37:229-233   
 2. Iida S*, et al.*: *Nat Genet* 1997, 17:226-230   
 3. Naresh KN: *Haematologica* 2007, 92:267-268  
 4. Gaidano G*, et al.*: *Leukemia* 2000, 14:563-566   
 5. Falini B*, et al.*: *Blood* 2000, 95:2084-2092  
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**MUM1, EP190 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.**