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| Clone | EP285 |
| Source | Rabbit Monoclonal |
| Cat # | PR220-6ml RTU PR220-3ml RTU  HAR220-6ml RTU HAR220-3ml RTU |
| Regulatory Status | IVD |

**TFE3- (EP285)**

**Intended Use:**

This antibody is intended for use to qualitatively identify TFE3 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:**   
  
TFE3, known as Transcription Factor E3, is a member of the helix- loop-helix family of transcription factors. TFE3 interacts with several transcriptional regulators to affect cell growth, proliferation and osteoclast and macrophage differentiation. In the immune system, TFE3 plays important roles in modulating immunoglobulin heavy- chain expression and regulating B cell activation. Additionally, TFE3 participates in insulin signaling and may play a role in enhancing insulin sensitivity.

The TFE3 gene is located on chromosome Xp11.2. Translocations within this region generates TFE3 gene fusion products and clinically manifests as Xp11.2 translocation renal cell carcinoma (Xp11 TRCC), alveolar soft part sarcoma, perivascular epithelioid cell tumor, and epithelioid hemangioendotheliomas. Since translocation can lead to overexpression of nuclear TFE3 and is a marker of metastasis and poor survival, immunohistochemical detection of TFE3 can be valuable as a prognostic factor, an indicator of lymph node metastasis, and a screening marker for Xp11.2 translocation before genetic analysis.

**Isotype:** Rabbit IgG

**Immunogen:** A synthetic peptide corresponding to residues of human TFE3 protein .

**Reagent Provided:**

**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 Buffer** **(PathnSitu Cat # PS009)** as antigen retrieval   
 solution Heat Retrieval Method: Retrieve sections under steam pressure   
 for 15 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 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:** Cytoplasm/Nucleus

**Positive Control:** RCC, Alveolar soft part sarcoma

**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. Alexiev BA.: J Cytol Histol. 2013 May:4(2):173-5   
 2. Argani P, et al.: Am J Surg Pathol. 2003 Jun;27(6):750-61   
 3. Klatte T, et al.: Am J Clin Pathol. 2012 May;137(5):761-8   
 4. Merrell K, et al.: Mol Cell Biol. 1997 Jun;17(6):3335-44   
 5. Pflueger D, et al.: Neoplasia. 2013 Nov;15(11):1231-40   
 6. Shimano H.: J Mol Med (Berl). 2007 May;85(5):437-44

**TFE3, EP285 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.**