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| Clone | EP254 |
| Source | Rabbit Monoclonal |
| Cat # | PR218-6ml RTU PR218-3ml RTU  CR218-0.1ml Conc CR218-0.5ml Conc HAR218-6ml RTU HAR218-3ml RTU |
| Regulatory Status | IVD |

TSH (EP254)

**Intended Use:**

This antibody is intended for use to qualitatively identify Thyrotrophin (TSH) 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:**   
  
TSH is a member of the glycoprotein hormone family, constituting a subset of the cystine-knot growth factor superfamily. TSH is produced by the pituitary thyrotrophs and released into circulation in a pulsatile manner. It stimulates thyroid functions using a specific membrane TSH receptor (TSHR) that belongs to the superfamily of G protein-coupled receptors (GPCRs). TSH beta is the beta subunit of thyroid stimulating hormone.

This TSH antibody labels normal and neoplastic thyrotropic cells. It may be useful in classification of pituitary tumors.

**Isotype:** Rabbit IgG

**Immunogen:** A synthetic peptide corresponding to residues of human TSH (subunit beta) protein

**Reagent Provided:   
 Concentrated format:** Antibody to TSH 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 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

**Positive Control:** Pituitary, Pituitary Adenoma

**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. Szkudlinski MW, et al.: Physiol Rev 2002, 82:473-502  
 2. Schaefer JS, et al.: Gen Comp Endocrinol 2009, 162:241-244   
 3. Cravioto H, et al.: Acta Neuropathol 1981, 53:281-292