

## PIT-1/POU1F1 (ZR440) Rabbit Monoclonal Antibody

Host:RabbitSpecificity:HumanImmunogen:Recombinant human full-length POU1F1 proteinIg Class:IgGStorage:Store at 2-8°C for up to 2 years for concentrate form and 18 months for predilute form.

**Specifications:** PIT-1/POU1F1 (ZR440) Rabbit Monoclonal primary antibody detects PIT-1/POU1F1 protein in formalin-fixed, paraffin-embedded samples by immunohistochemical (IHC) staining.

**Staining procedures:** Use formalin-fixed and paraffin-embedded sections. Retrieval conditions: Pretreatment of deparaffinized samples via heat-induced epitope retrieval is recommended. Detection method: Polymer anti-mouse/rabbit Ig detection system. Working dilution: 1:100-200. Positive Control: sample known to contain PIT-1/POU1F1 protein.

## Localization: Nucleus.

Intended Use: Research Use Only (RUO). This antibody is not for diagnostic use.

**Description:** Transcriptional regulators play a critical role in development by mediating tissue- and cell-specific transcription. POU domain factors are transcriptional regulators characterized by a bipartite DNA binding domain consisting of two highly conserved regions tethered by a variable linker of 14-26 amino acids. Pit-1, also known as growth hormone factor-1 (GHF-1), a member of the POU homeodomain family, is essential for the normal development of the anterior pituitary gland, where it is required to form somatotropes, lactotropes, and thyrotropes. In somatotropes and lactotropes, Pit-1 activates the production of growth hormone and prolactin, respectively. In addition, Pit-1 acts as a repressor of gene expression, which allows for the differentiation of specific cell types. Pit-1 is expressed as two alternatively spliced products, designated Pit-1a and Pit-1b, which differ in their trans-activation ability. Mutations in the Pit-1 gene are believed to result in combined pituitary hormone deficiency (CPHD) for growth hormone, Prolactin, and thyroid-stimulating hormone. The gene which encodes Pit-1 maps to human chromosome 3p11.2.

**Supplied As:** Purified antibody in Tris-HCl pH 7.4 buffer containing stabilizing proteins (including < 1% Bovine Serum Albumin) and < 0.1% ProClin by volume.

## **References:**

- 1. Yao, J., et al. J. Clin. Invest. 2016; 126: 732-744.
- 2. Beatriz M, et al. Am J Surg Pathol; 2017; 41: 586-595

REF Z2796RL/ Z2796RS/ Z2796RT/ Z2796RP (1.0ml Concentrate/ 0.5ml Con./ 0.1ml Con./ 7ml Pre-dil)

