

**Mouse Anti-PIT1/POU1F1 [2C11]: MC0493, MC0493RTU7**

**Intended Use:** For Research Use Only

**Description:** Belongs to the POU transcription factor family. Class-1 subfamily. Transcription factor involved in the specification of the lactotrope, somatotrope, and thyrotrope phenotypes in the developing anterior pituitary. Activates growth hormone and prolactin genes. Specifically binds to the consensus sequence 5'-TAAAT-3'. Defects in POU1F1 are the cause of pituitary hormone deficiency combined type 1 (CPHD1). CPHD is characterized by impaired production of growth hormone (GH) and one or more of the other five anterior pituitary hormones.

**Specifications:**

Clone: 2C11  
 Source: Mouse  
 Isotype: IgG1k  
 Reactivity: Human, mouse, rat, sheep, cow  
 Localization: Nucleus  
 Formulation: Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ICC/IF, WB  
 Package:

Description	Catalog No.	Size
PIT1/POU1F1 Concentrated	MC0493	1 ml
PIT1/POU1F1 Prediluted	MC0493RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Liver, pituitary adenomas  
 Concentrated Dilution: 50-200  
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE mouse wild type pituitaries stained with anti-PIT1

**References:**

1. MicroRNAs Regulate Pituitary Development, and MicroRNA 26b Specifically Targets Lymphoid Enhancer Factor 1 (Lef-1), Which Modulates Pituitary Transcription Factor 1 (Pit-1) Expression. Zhang Z, et al. J Biol Chem 285:34718-28, 2010.
2. Inactivating Pit-1 mutations alter subnuclear dynamics suggesting a protein misfolding and nuclear stress response. Sharp ZD, et al. J Cell Biochem 92:664-78, 2004.
3. Mancini MG, et al. Subnuclear partitioning and functional regulation of the Pit-1 transcription factor. J Cell Biochem 72:322-38, 1999.