

**Mouse Anti-TPIT/TBX19 [CL6251]: MC0305**

**Intended Use:** For Research Use Only

**Description:** T-box transcription factor (TBX19 or TPIT) is a member of a phylogenetically conserved family of genes that share a common DNA-binding domain, the T-box. T-box genes encode transcription factors involved in the regulation of developmental processes. TBX19 is the human ortholog of mouse Tbx19/Tpit gene. Studies in mouse show that Tpit protein is present only in the two pituitary pro-opiomelanocortin (POMC)-expressing lineages, the corticotrophs and melanotrophs. Mutations in the human ortholog were found in patients with isolated deficiency of pituitary POMC-derived ACTH, suggesting an essential role for this gene in differentiation of the pituitary POMC lineage.

**Specifications:**

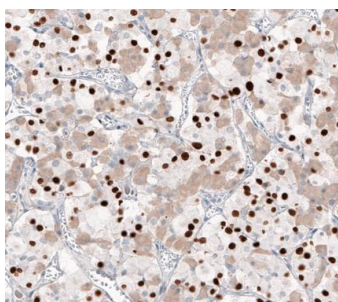
Clone: CL6251  
 Source: Mouse  
 Isotype: IgG1  
 Reactivity: Human  
 Immunogen: Recombinant protein of human TBX19  
 Localization: Nucleus  
 Formulation: Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC  
 Package:

Description	Catalog No.	Size
TPIT/TBX19 Concentrated	MC0305	1 ml

**IHC Procedure\*:**

Positive Control Tissue: Pituitary gland tissue  
 Concentrated Dilution: 50-200  
 Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes 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 human pituitary gland stained with anti-TPIT using DAB

**References:**

1. Multihormonal pituitary adenoma concomitant with Pit-1 and Tpit lineage cells causing acromegaly associated with subclinical Cushing's disease: a case report. Takiguchi T, et al. BMC Endocr Disord. Sep 2;17(1):54, 2017.
2. A Pituitary cell type coexpressing messenger ribonucleic acid of proopiomelanocortin and the glycoprotein hormone alpha-subunit in neonatal rat and chicken: rapid decline with age and reappearance in vitro under regulatory pressure of corticotropin-releasing hormone in the rat. Pals K, et al. Endocrinology. Oct;147(10):4738-52. Epub 2006 Jul 13, 2006.
3. The turkey transcription factor Pit-1/GHF-1 can activate the turkey prolactin and growth hormone gene promoters in vitro but is not detectable in lactotrophs in vivo. Weatherly KL, et al. Gen Comp Endocrinol. Sep;123(3):244-53, 2001.