

**Mouse Anti-Luteinizing Hormone-beta (LH-beta) [SPM103]: MC0545, MC0545RTU7**

**Intended Use:** For Research Use Only

**Description:** Luteinizing hormone (LH) is a glycoprotein. Each monomeric unit is a sugar-like protein molecule; two of these make the full, functional protein. Its structure is similar to the other glycoproteins, follicle-stimulating hormone (FSH), thyroid-stimulating hormone (TSH), and human chorionic gonadotropin (hCG). The protein dimer contains 2 polypeptide units, labeled alpha and beta subunits that are connected by two bridges. The alpha subunits of LH, FSH, TSH, and hCG are identical, and contain 92 amino acids. The beta subunits vary. LH has a beta subunit of 121 amino acids (LHB) that confers its specific biologic action and is responsible for interaction with the LH receptor. This beta subunit contains the same amino acids in sequence as the beta subunit of hCG and both stimulate the same receptor; however, the hCG beta subunit contains an additional 24 amino acids and the hormones differ in the composition of their sugar moieties. LH is synthesized and secreted by gonadotrophs in the anterior lobe of the pituitary gland. In concert with the other pituitary gonadotropin follicle-stimulating hormone (FSH), it is necessary for proper reproductive function. In the female, an acute rise of LH levels triggers ovulation. In the male, where LH has also been called Interstitial Cell-Stimulating Hormone (ICSH), it stimulates Leydig cell production of testosterone. LH is a useful marker in classification of pituitary tumors and the study of pituitary disease.

**Specifications**

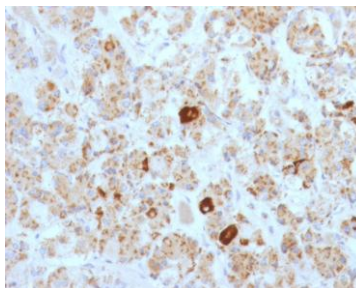
Clone:	SPM103
Source:	Mouse
Isotype:	IgG1k
Reactivity:	Human
Immunogen:	Recombinant beta sub-unit of human LH
Localization:	Cytoplasm
Formulation:	Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
Storage:	Store at 2°- 8°C
Applications:	IHC
Package:	

Description	Catalog No.	Size
Luteinizing Hormone-beta (LH-beta) Concentrated	MC0545	1 ml
Luteinizing Hormone-beta (LH-beta) Prediluted	MC0545RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue:	Anterior pituitary gland
Concentrated Dilution:	50-200
Pretreatment:	Citrate pH6.0, 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 stained with anti-LH-beta using DAB

**References:**

1. Changes in luteinizing hormone-containing gonadotrophs after moulting induced by fasting and zinc in laying hens (*Gallus domesticus*). Sandhu MA, et al. *J Anim Physiol Anim Nutr (Berl)*. Dec;92(6):668-76, 2008.
2. Insulin-like growth factor-I mRNA and peptide in the human anterior pituitary. Jevdjovic T et al. *J Neuroendocrinol* 19:335-41, 2007.