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Anti-LH, alpha (Luteinizing Hormone, alpha) Antibody

Mouse Monoclonal Antibody
Catalog # AH13107

Product Information

Application	IHC-P
Primary Accession	P01215
Other Accession	119689
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	LHa/756
Calculated MW	13075

Additional Information

Gene ID	1081
Other Names	CG-alpha; CGA; Chorionic Gonadotrophin Alpha; Follicle Stimulating Hormone Alpha; Follitropin Alpha; FSH-alpha; FSHA; GPH Alpha; GPHA1; LHA; LH-alpha; Luteinizing Hormone Alpha; Lutropin Alpha; Thyroid Stimulating Hormone Alpha; Thyrotropin Alpha; TSHA
Application Note	Immunohistology (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(No special pre-treatment is required for staining of formalin-fixed tissues. Note that HIER is NOT recommended for this antibody.),Optimal dilution for a specific application should be determined.
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-LH, alpha (Luteinizing Hormone, alpha) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

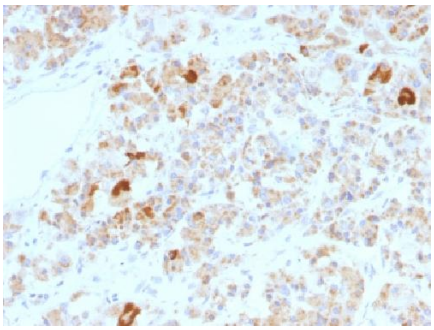
Name	CGA
Function	Shared alpha chain of the active heterodimeric glycoprotein hormones thyrotropin/thyroid stimulating hormone/TSH, lutropin/luteinizing hormone/LH, follitropin/follicle stimulating hormone/FSH and choriogonadotropin/CG. These hormones bind specific receptors on target

	cells that in turn activate downstream signaling pathways.
Cellular Location	Secreted

Background

This MAb reacts with a protein of ~13kDa, identified as alpha sub-unit of Luteinizing Hormone (LH). 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.

Images



Formalin-fixed, paraffin-embedded human Pituitary stained with LH alpha Monoclonal Antibody (LHa/756).