

Datasheet for 600-101-MR6

hCG Alpha chain Antibody

Overview

Description:	Anti-hCG alpha (GOAT) Antibody - 600-101-MR6
Item No.:	600-101-MR6
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Goat

Product Details

Background:	Human Chorionic Gonadotropin (hCG) is a member of the glycoprotein hormone family which includes lutropin, follitropin, and thyrotropin. These hormones are heterodimers consisting of a common alpha subunit, and a unique beta chain which confers their biological specificity to the hormones. These hormones bind specific receptors on target cells that in turn activate downstream signaling pathways. HCG is secreted in large quantities by normal trophoblasts. Its presence is in trace amounts in non-pregnant urine and sera but rises sharply during pregnancy. CGA is extracellular and secreted, expressed in over 90 organs, but has its highest expression level in placenta. Anti-hCG alpha detects hCG alpha in human cells and tissue and could be useful in detecting cells and tumors of trophoblastic origin such as choriocarcinoma. Anti-hCG Antibody is useful for researchers interested in pregnancy, hormone research, and cancer research.
Synonyms:	Goat Anti-Human Chorionic Gonadotropin Alpha Antibody, Goat anti-hCGα Antibody, α-hCG, a-hCG, alpha-hCG, Glycoprotein hormones alpha chain, Anterior pituitary glycoprotein hormones common subunit alpha, Choriogonadotropin alpha chain, Chorionic gonadotrophin subunit alpha, CG-alpha, Follicle-stimulating hormone alpha chain, FSH-alpha, Follitropin alpha chain, Luteinizing hormone alpha chain, LSH-alpha, Lutropin alpha chain, Thyroid-stimulating hormone alpha chain, TSH-alpha, Thyrotropin alpha chain
Host Species:	Goat
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CGA
Reactivity:	Human
Immunogen Type:	Native Protein
Immunogen:	Anti-Human Chorionic Gonadotropin Alpha Antibody was prepared from whole goat serum produced by repeated immunizations with Hu Chorionic Gonadotropin Alpha Subunit protein.
Purity/Specificity:	This affinity purified antibody is directed against hCG alpha. This product was affinity purified from monospecific antiserum by immunoaffinity purification. This product reacts with Full Human Chorionic Gonadotropin (hCG) and Human Chorionic Gonadotropin Alpha chain (α -hCG).
Relevant Links:	• UniProtKB - P01215 • NCBI - NP_000726.1 • GeneID - 1081

Application Details

Tested Applications:	ELISA, WB
Application Note:	Anti-Human Chorionic Gonadotropin (hCG) Alpha Antibody has been tested in ELISA and WB. Expect a band at ~14.9kDa for the alpha chain in western blot using appropriate tissues and lysates. ELISA reactivity expected against alpha hCG with an expected titer of ~1:100,000 and full hCG at ~1:50,000 dilution.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:20,000-1:100,000
WB:	1:1000

Formulation

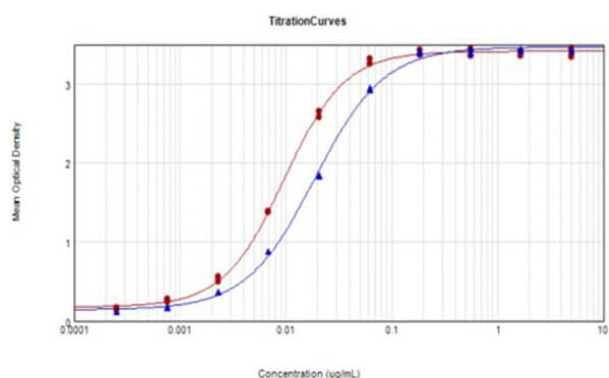
Physical State:	Liquid (sterile filtered)
Concentration:	0.78 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
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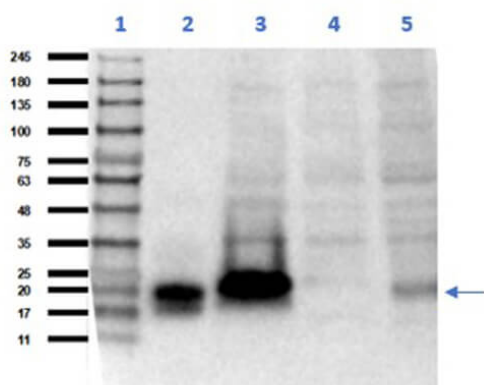
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



ELISA

ELISA results of Goat Anti-Human Chorionic Gonadotropin Alpha Chain Antibody reactive against alpha hCG and full hCG. Each well was coated in duplicate at 10µg/mL of alpha-hCG (RED) and full hCG (BLUE) protein. The starting dilution of antibody was 5µg/mL and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using 3% Fish Gel/PBS Blocking Buffer (MB-066-1000), Donkey Anti-Goat IgG MX8 HRP Conjugated Secondary (605-703-125-0025), and TMBE-1000 substrate.



Western Blot

Western Blot of Goat Anti-Human Chorionic Gonadotropin Alpha Antibody. Lane 1: Opal Prestained Molecular Weight Marker (p/n MB-210-0500). Lane 2: alpha hCG (0.05µg) [+]. Lane 3: alpha hCG/U-20S WCL (p/n W09-001-374) (0.05µg/20µg) [+]. Lane 4: U-20S WCL (p/n W09-001-374) (20µg) [-]. Lane 5: HeLa WCL (p/n W09-000-364) (35µg) [+]. Primary Antibody: Anti-α-hCG at 1:1000 overnight at 2-8°C. Secondary Antibody: Donkey Anti-Goat IgG mx8 HRP Conjugated (p/n 605-703-125-0025) at 1:40,000 for 30 mins at RT. Block: BlockOut Buffer (p/n MB-073). Exposure: 30 sec. Predicted MW: alpha subunit ~14.9kDa, full hCG ~37kDa, luteinizing hormone (LH) ~29kDa, thyroid stimulating hormone (TSH) ~28kDa, follicle stimulating hormone (FSH) ~30kDa. Observed MW: alpha subunit ~15-20kDa, full hCG ~35kDa.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.