

# Product Datasheet

## LHR Antibody - BSA Free NLS1436

Unit Size: 0.05 ml

Keep as concentrated solution. Aliquot and store at -20C or below. Avoid multiple freeze-thaw cycles.

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Updated 10/23/2024 v.20.1

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**NLS1436**

LHR Antibody - BSA Free

**Product Information**

<b>Unit Size</b>	0.05 ml
<b>Concentration</b>	1.0 mg/ml
<b>Storage</b>	Keep as concentrated solution. Aliquot and store at -20C or below. Avoid multiple freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	0.1% Sodium Azide
<b>Isotype</b>	IgG
<b>Purity</b>	Immunogen affinity purified
<b>Buffer</b>	PBS

**Product Description**

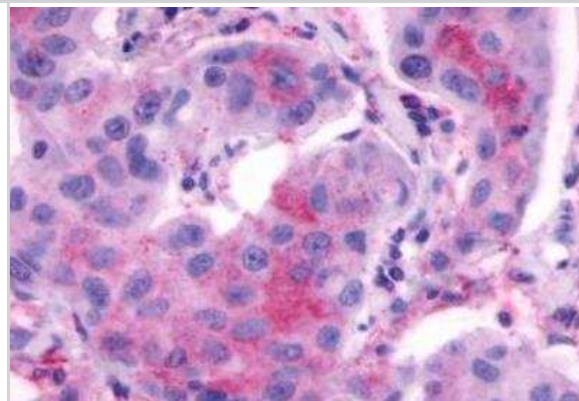
<b>Description</b>	Product can be stored undiluted at 4C for up to 1 month.
<b>Host</b>	Rabbit
<b>Gene ID</b>	3973
<b>Gene Symbol</b>	LHCGR
<b>Species</b>	Human, Bovine, Canine
<b>Reactivity Notes</b>	Bovine reactivity reported in scientific literature (Martin I et al). Predicted cross-reactivity based on sequence identity: Gorilla (100%), Gibbon (100%), Marmoset (95%), Bat (89%), Rabbit (89%), Equine (89%). Use in Canine reported in scientific publication (PMID: 32584181).
<b>Specificity/Sensitivity</b>	Human LHR. BLAST analysis of the peptide immunogen showed no homology with other human proteins.
<b>Immunogen</b>	Synthetic 19 amino acid peptide from C-terminus of human LHR.

**Product Application Details**

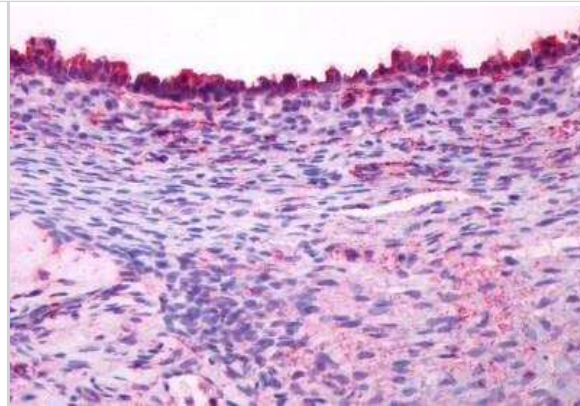
<b>Applications</b>	Immunohistochemistry, Immunohistochemistry-Paraffin
<b>Recommended Dilutions</b>	Immunohistochemistry, Immunohistochemistry-Paraffin 5 ug/ml

**Images**

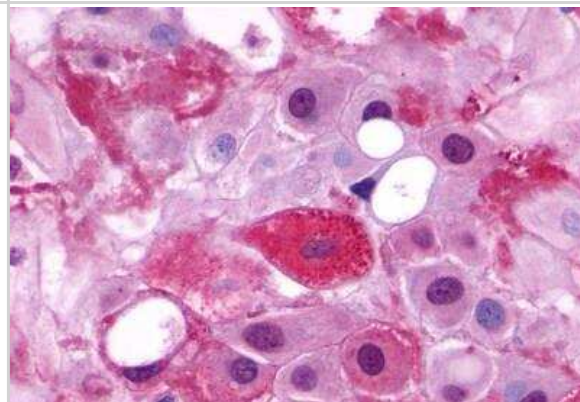
Immunohistochemistry-Paraffin: LHR Antibody [NLS1436] - Anti-LHCGR / LHR / LH Receptor antibody IHC of human Breast, Carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval.



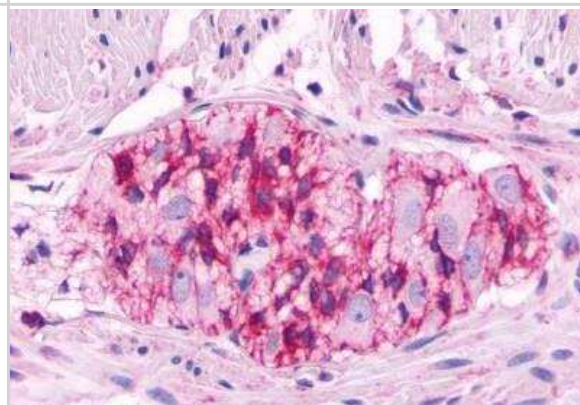
Immunohistochemistry-Paraffin: LHR Antibody [NLS1436] - Ovary, Graafian Follicle



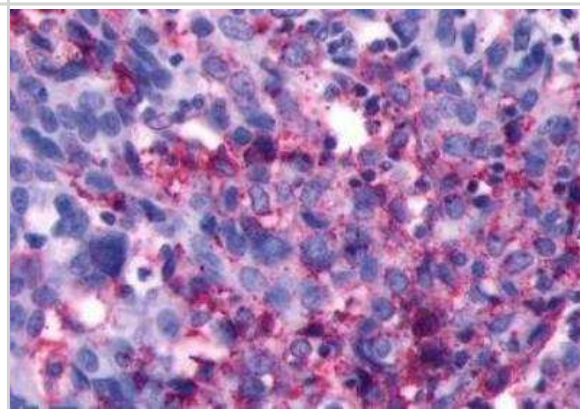
Immunohistochemistry-Paraffin: LHR Antibody [NLS1436] - Placenta



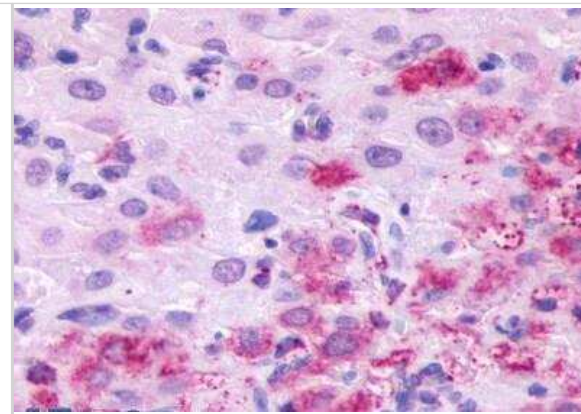
Immunohistochemistry-Paraffin: LHR Antibody [NLS1436] - Colon Myenteric Plexus



Immunohistochemistry-Paraffin: LHR Antibody [NLS1436] - Anti-LHCGR / LHR / LH Receptor antibody IHC of human Ovary, Carcinoma. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval.



Immunohistochemistry-Paraffin: LHR Antibody [NLS1436] - Anti-hCG receptor antibody IHC of human ovary, corpus luteum. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval.



## Publications

Junhua Zhou, Elena A B Azizan, Claudia P Cabrera, Fabio L Fernandes-Rosa, Sheerazed Boulkroun, Giulia Argentesi, Emily Cottrell, Laurence Amar, Xilin Wu, Sam O'Toole, Emily Goodchild, Alison Marker, Russell Senanayake, Sumedha Garg, Tobias Åkerström, Samuel Backman, Suzanne Jordan, Satyamaanasa Polubothu, Daniel M Berney, Anna Gluck, Kate E Lines, Rajesh V Thakker, Antoinette Tuthill, Caroline Joyce, Juan Pablo Kaski, Fiona E Karet Frankl, Lou A Methereell, Ada E D Teo, Mark Gurnell, Laila Parvanta, William M Drake, Eva Wozniak, David Klinzing, Jyn Ling Kuan, Zenia Tiang, Celso E Gomez Sanchez, Per Hellman, Roger S Y Foo, Charles A Mein, Veronica A Kinsler, Peyman Björklund, Helen L Storr, Maria-Christina Zennaro, Morris J Brown Somatic mutations of GNA11 and GNAQ in CTNNB1-mutant aldosterone-producing adenomas presenting in puberty, pregnancy or menopause. *Nature genetics* 2021-10-14 [PMID: 34385710]

Guler S, Asmaz E, Saricetin A et al. Effects of Calcium, Available Phosphorus and Microbial Phytase on Ovarian FSHR and LHR Expression in Laying Hens *Journal of the Hellenic Veterinary Medical Society* 2023-10-18

Zwida KH, Kutzler MA. Canine splenic hemangiosarcoma cells express and activate luteinizing hormone receptors in vitro *Am J Vet Res* 2022-11-03 [PMID: 36327166] (ICC/IF, Canine)

### Details:

Citation using the FITC version of this antibody.

Kiefel CA, Kutzler MA Assessment of luteinizing hormone receptor expression in structural support tissues of canine hip and femorotibial joints *Am. J. Vet. Res.* 2020-07-01 [PMID: 32584181] (IF/IHC, Canine)

Scarlet D, Aurich C, Ille N et al. Anti-Muellerian Hormone, inhibin A, gonadotropins and gonadotropin receptors in bull calves after partial scrotal resection, orchidectomy and Burdizzo castration. *Theriogenology* 1905-07-08 [PMID: 27693012] (IF/IHC)

Noci I, Sorbi F, Mannini L et al. LH/hCG-Receptor Expression May Have a Negative Prognostic Value in Low-Risk Endometrial Cancer. *Front Oncol* 2016-09-09 [PMID: 27610354]

Yung Y, Aviel-Ronen S, Maman E et al. Localization of Luteinizing Hormone Receptor Protein in the Human Ovary. *Mol. Hum. Reprod.* 2014-05-29 [PMID: 24874553] (IHC-P, Human)

Martin I, Rodrigues MMP, Fujihara CJ et al. Localization patterns of steroid and luteinizing hormone receptors in the corpus luteum of Nelore (*Bos taurus indicus*) cows throughout the estrous cycle. *Livestock Science.* 2013-08-01 (IF/IHC, Bovine)



## Procedures

### Immunohistochemistry Protocol for Luteinizing Hormone Receptor Antibody (NLS1436)

Immunohistochemistry Protocol for Luteinizing Hormone Receptor Antibody (NLS1436):

Immunohistochemistry

1. Prepare tissue with formalin fixation and by embedding it in paraffin wax.
2. Make 4 um sections and place on pre-cleaned and charged microscope slides.
3. Heat in a tissue-drying oven for 45 minutes @ 60 degrees Celcius.
4. Deparaffinize the tissues by wash drying the slides in 3 changes of xylene for 5 minutes each @ RT.
5. Rehydrate the tissues by washing the slides in 3 changes of 100% alcohol for 3 minutes each @ RT.
6. Wash the slides in 2 changes of 95% alcohol for 3 minutes each @ RT.
7. Wash the slides in 1 change of 80% alcohol for 3 minutes @ RT.
8. Rinse the slides in gentle running distilled water for 5 minutes @ RT.
9. Perform antigen retrieval by steaming the slides in 0.01M sodium citrate buffer (pH 6.0) @ 99-100 degrees Celcius for 20 minutes.
10. Remove the slides from the heat and let stand in buffer @ RT for 20 minutes.
11. Rinse the slides in 1X TBS-T for 1 minute @ RT.

**\*\*Do not allow the tissues to dry at any time during the staining procedure\*\***

12. Begin the immunostaining by applying a universal protein block for 20 minutes @ RT.
13. Drain protein block from the slides and apply the diluted primary antibody for 45 minutes @ RT.
14. Rinse the slide in 1X TBS-T for 1 minute @ RT.
15. Apply a biotinylated anti-rabbit IgG (H+L) secondary for 30 minutes @ RT.
16. Rinse the slide in 1X TBS-T for 1 minute @ RT.
17. Apply an alkaline phosphatase streptavidin for 30 minutes @ RT.
18. Rinse the slide in 1X TBS-T for 1 minute @ RT.
19. Apply an alkaline phosphatase chromagen substrate for 30 minutes @ RT.
20. Rinse the slide in distilled water for 1 minute @ RT.

**\*\*This method should only be used if the chromagen substrate is alcohol insoluble (ie: Vector Red, DAB)\*\***

21. Dehydrate the tissue by washing the slides in 2 changes of 80% alcohol for 1 minute each @ RT.
22. Wash the slides in 2 changes of 95% alcohol for 1 minute each @ RT.
23. Wash the slides in 3 changes of 100% alcohol for 1 minute each @ RT.
24. Wash the slides in 3 changes of xylene for 1 minute each @ RT.
25. Apply cover slip.





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### **Products Related to NLS1436**

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HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
291-G1-200	IGF-I/IGF-1 [Unconjugated]

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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