abcam

ab204950

Anti-hCG receptor/LHR antibody [8G9A2]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Mouse Lhcgr aa 1-400. The exact immunogen used to generate this antibody is proprietary information. Database link P30730
Clone number	8G9A2
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/200 - 1/400
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/500 - 1/2000
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information LHCGR

Function	Receptor for lutropin-choriogonadotropic hormone (PubMed:11847099). The activity of this receptor is mediated by G proteins which activate adenylate cyclase (PubMed:11847099).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

This product was changed from ascites to supernatant. Lot no's high than GR273983-8 are from Tissue Culture Supernatant.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The hCG receptor also known as LHR LHCGR or LH/CG receptor belongs to the G-protein coupled receptor family and is essential for reproductive processes. It has a mass of around 85 kDa and it is expressed mostly in the ovaries and testes. The receptor binds to the hCG protein also referred to as human chorionic gonadotropin and LH luteinizing hormone. Both the hCG protein and the hCG peptide stimulate the receptor leading to various reproductive functions. The anti-LHR antibodies target this receptor specifically allowing for detailed study and potential clinical applications.
Biological function summary	The hCG receptor plays a significant role in mediating reproductive hormone signaling. As part of a complex with the hCG protein it facilitates the regulation of steroidogenesis and gametogenesis. In females the activation of LHR by the hCG hormone results in the maintenance of the corpus luteum important for progesterone production in early pregnancy. Meanwhile in males LHR influences testosterone production by Leydig cells impacting spermatogenesis significantly.
Pathways	The hCG receptor significantly affects reproductive endocrine pathways that include the cAMP/PKA signaling pathway. Through this pathway the receptor interacts with several related proteins such as adenylate cyclase which further activates cAMP production. The activation of protein kinase A (PKA) facilitates downstream signaling events essential in the ovulation and spermatogenesis processes. The synergy between the hCG receptor and these pathways underlines its biological significance.
Associated diseases and disorders	The hCG receptor is associated with reproductive health issues like infertility and polycystic ovary syndrome (PCOS). Dysregulation or mutations in LHR can disrupt normal reproductive functions and lead to these disorders. The receptor's interaction with proteins such as FSH receptor (FSHR) further influences the manifestation of these conditions making it a target for therapeutic interventions in reproductive medicine both in clinics and private labs in various places including hCG-focused research in Mexico.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

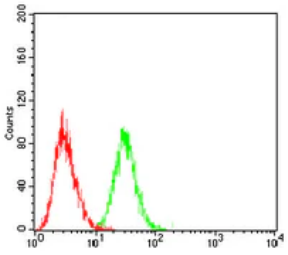
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

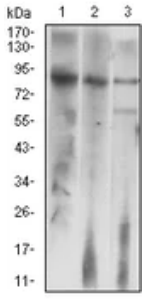
2 product images



Flow Cytometry - Anti-hCG receptor/LHR antibody [8G9A2] (ab204950)

HCG receptor/LHR Flow Cytometry staining using mouse Anti-hCG receptor/LHR antibody

Flow cytometric analysis of Jurkat cells labeling hCG receptor/LHR with ab204950 at 1/200 dilution (green) compared with a negative control (red).



Western blot - Anti-hCG receptor/LHR antibody [8G9A2] (ab204950)

All lanes:
Western blot - Anti-hCG receptor/LHR antibody [8G9A2] (ab204950) at 1/500 dilution

Lane 1:
HepG2 cell lysate

Lane 2:
Jurkat cell lysate

Lane 3:
SMMC-7721 cell lysate

Predicted band size: 79 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.