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Anti-FSH Receptor Picoband Antibody

Catalog # ABO10124

Product Information

Application	WB
Primary Accession	P23945
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Follicle-stimulating hormone receptor(FSH-R)(FSHR) detection. Tested with WB in Human;Mouse.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	2492
Other Names	Follicle-stimulating hormone receptor, FSH-R, Follitropin receptor, FSHR, LGR1
Calculated MW	78238
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Mouse
Subcellular Localization	Cell membrane; Multi-pass membrane protein.
Tissue Specificity	Sertoli cells and ovarian granulosa cells.
Source	Eukaryota
Protein Name	Follicle-stimulating hormone receptor(FSH-R)
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human FSH Receptor (414-438aa YLLLIASVDIHTKSQYHNYAIDWQT), identical to the related mouse and rat sequences.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Protein Information

Name	FSHR
Synonyms	LGR1
Function	G protein-coupled receptor for follitropin, the follicle- stimulating hormone (PubMed:11847099, PubMed:24058690, PubMed:24692546). Mediates FSH signaling through cAMP/protein kinase A (PKA) and phosphatidylinositol-3 kinase (PI3K)/protein kinase B (AKT) pathways to regulate ovarian follicular development and steroidogenesis (PubMed:24058690). Has diverse extragonadal functions: signals via a GNAI2-coupled FSHR on osteoclasts and their precursors, resulting in activation of MEK/ERK, NF-kappa-B, and AKT pathways and thus increases osteoclastogenesis and bone resorption (By similarity). Regulates glucose-stimulated insulin secretion in pancreatic beta-cells in a bell curve manner, with moderate FSH levels promoting insulin secretion via Galphas/cAMP/PKA pathways while high FSH levels inhibit this effect through Galphai coupling (By similarity). In adipose tissue, inhibits thermogenesis by suppressing UCP1 expression and promotes lipogenesis via CREB/PPARgamma pathways (By similarity). Also affects hepatic cholesterol metabolism by increasing serum total and low-density- lipoprotein cholesterol (LDL-C) by inhibiting the expression of LDL receptor (LDLR) (PubMed:26583582).
Cellular Location	Cell membrane; Multi-pass membrane protein
Tissue Location	Sertoli cells and ovarian granulosa cells.

Background

The follicle-stimulating hormone receptor or FSH receptor (FSHR) is a transmembrane receptor that interacts with the follicle-stimulating hormone (FSH) and represents a G protein-coupled receptor (GPCR). This FSHR gene is mapped to chromosome 2p21 by fluorescence in situ hybridization. The protein encoded by this gene belongs to family 1 of G-protein coupled receptors. It is the receptor for follicle stimulating hormone and functions in gonad development. Mutations in this gene cause ovarian dysgenesis type 1, and also ovarian hyperstimulation syndrome. Alternative splicing results in multiple transcript variants.

Images

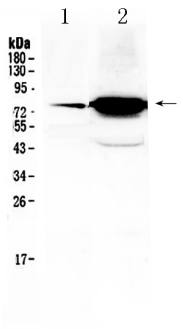


Figure 1. Western blot analysis of FSH Receptor using anti- FSH Receptor antibody (ABO10124). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse ovary tissue lysates, Lane 2: HELA whole Cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- FSH Receptor antigen affinity purified polyclonal antibody (Catalog # ABO10124) at 0.5 □¼g/mL overnight at 4 □°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The

signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for FSH Receptor at approximately 78KD. The expected band size for FSH Receptor is at 78KD.

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