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GHSR Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11873b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q92847
Other Accession	A5A4K9, Q95254, NP_940799
Reactivity	Human, Rat, Mouse
Predicted	Pig, Rabbit, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18124
Calculated MW	41329
Antigen Region	326-357

Additional Information

Gene ID	2693
Other Names	Growth hormone secretagogue receptor type 1, GHS-R, GH-releasing peptide receptor, GHRP, Ghrelin receptor, GHSR
Target/Specificity	This GHSR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 326-357 amino acids from the C-terminal region of human GHSR.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GHSR Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GHSR
Function	G protein-coupled receptor specific to ghrelin, an appetite- regulating peptide hormone commonly found in stomach (PubMed:35027551,

PubMed:39833471). Upon activation, stimulates appetite and promotes growth hormone secretion (PubMed:10604470, PubMed:11322507, PubMed:35027551, PubMed:39833471). Ghrelin binding causes a conformation change that triggers signaling via guanine nucleotide- binding proteins (G proteins) and modulates the activity of downstream effectors, such as phospholipase C (By similarity). GHSR is coupled to G(q) G proteins and mediates production of diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) (By similarity). Also binds other growth hormone releasing peptides (GHRP) (e.g. Met-enkephalin and GHRP- 6) as well as non-peptide, low molecular weight secretagogues (e.g. L- 692, 429, MK-0677, adenosine) (PubMed:10604470, PubMed:11322507). Also plays a role in synaptic plasticity independently of ghrelin by forming a heteromer with the dopamine receptors DRD1 and DRD2 in neurons (By similarity). Following DRD1 activation by dopamine in hippocampal neurons, GHSR acts as a coreceptor, resulting in DRD1 coupling to G(q) at the expense of G(s), initiating hippocampal synaptic plasticity involved in memory and learning (By similarity). Following DRD2 activation by dopamine in lumbosacral defecation centers, GHSR acts as a coreceptor, resulting in DRD1 coupling to G(q) at the expense of G(i)/G(o), regulating defecation (By similarity).

Cellular Location Cell membrane; Multi-pass membrane protein

Tissue Location Pituitary and hypothalamus.

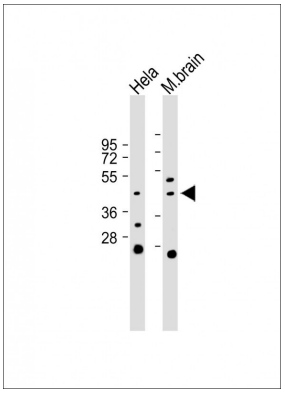
Background

This gene encodes a member of the G-protein coupled receptor family. The encoded protein may play a role in energy homeostasis and regulation of body weight. Two identified transcript variants are expressed in several tissues and are evolutionary conserved in fish and swine. One transcript, 1a, excises an intron and encodes the functional protein; this protein is the receptor for the Ghrelin ligand and defines a neuroendocrine pathway for growth hormone release. The second transcript (1b) retains the intron and does not function as a receptor for Ghrelin; however, it may function to attenuate activity of isoform 1a. Mutations in this gene are associated with autosomal idiopathic short stature.

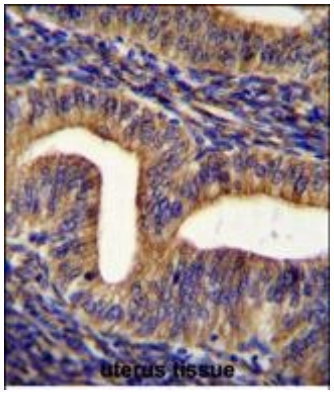
References

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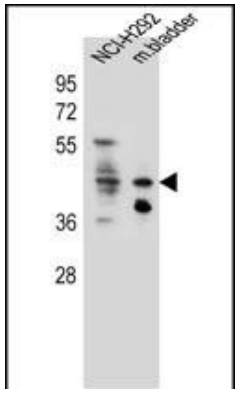
Images



All lanes :GHSR Antibody (C-term) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/10000 dilution. Observed band size : 45kDa Blocking/Dilution buffer: 5% NFDM/TBST.



GHSR Antibody (C-term) (Cat. #AP11873b)immunohistochemistry analysis in formalin fixed and paraffin embedded human uterus tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of GHSR Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



GHSR Antibody (C-term) (Cat. #AP11873b) western blot analysis in NCI-H292 cell line and mouse bladder tissue lysates (35ug/lane).This demonstrates the GHSR antibody detected the GHSR protein (arrow).

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