

TSHR Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21182c

Product Information

Application	WB, E
Primary Accession	P16473
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB51456
Calculated MW	86844

Additional Information

Gene ID	7253
Other Names	Thyrotropin receptor, Thyroid-stimulating hormone receptor, TSH-R, TSHR, LGR3
Target/Specificity	This TSHR antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 217-252 amino acids from the Central region of human TSHR.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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	TSHR Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TSHR
Synonyms	LGR3
Function	Receptor for the thyroid-stimulating hormone (TSH) or thyrotropin (PubMed: 11847099 , PubMed: 12045258). Also acts as a receptor for the heterodimeric glycoprotein hormone (GPHA2:GPHB5) or thyrostimulin

(PubMed:[12045258](#)). TSHR is coupled to G(s) proteins and mediates the activation of adenylate cyclase (PubMed:[11847099](#), PubMed:[35940205](#), PubMed:[35940204](#)). This leads to the generation of cyclic adenosine monophosphate (cAMP), which in turn activates protein kinase A (PKA). PKA subsequently phosphorylates downstream targets involved in thyroid hormone biosynthesis and secretion, including thyroid peroxidase (TPO) and the sodium/iodide symporter (NIS) (PubMed:[27638195](#)). Additionally, plays a central role in controlling thyroid cell metabolism (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein

Tissue Location

Expressed in thyroide cells (at protein level) (PubMed:11847099). Expressed in the thyroid (PubMed:2610690)

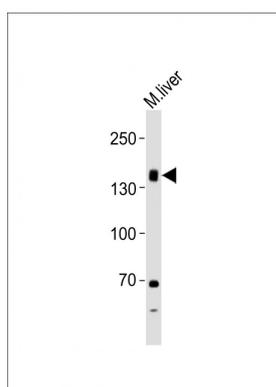
Background

Receptor for thyrothopin. Plays a central role in controlling thyroid cell metabolism. The activity of this receptor is mediated by G proteins which activate adenylate cyclase. Also acts as a receptor for thyrostimulin (GPA2+GPB5).

References

- Nagayama Y.,et al.Biochem. Biophys. Res. Commun. 165:1184-1190(1989).
Libert F.,et al.Biochem. Biophys. Res. Commun. 165:1250-1255(1989).
Misrahi M.,et al.Biochem. Biophys. Res. Commun. 166:394-403(1990).
Frazier A.L.,et al.Mol. Endocrinol. 4:1264-1276(1990).
Graves P.N.,et al.Biochem. Biophys. Res. Commun. 187:1135-1143(1992).

Images



Anti-TSHR Antibody (Center) at 1:1000 dilution + mouse liver lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 87 kDa
Blocking/Dilution buffer: 5% NFDm/TBST.

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