

# Anti-TSH-Receptor, B-Chain Antibody

Mouse Monoclonal Antibody Catalog # AH13560

### **Specification**

### Anti-TSH-Receptor, B-Chain Antibody - Product Information

Application IHC-P, IF, FC
Primary Accession P16473
Other Accession 160411
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype Mouse / IgG2a

Calculated MW 86844

### Anti-TSH-Receptor, B-Chain Antibody - Additional Information

#### **Gene ID 7253**

### **Other Names**

CHNG1; hTSHRI; LGR3; Thyroid-stimulating hormone receptor; Thyrotropin receptor; Thyrotropin receptor I; TSHR

#### **Application Note**

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \> <span class = "dilution\_IF">IF~~1:50~200</span><br \> <span class = "dilution\_FC">FC~~1:10~50</span>

## **Format**

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

## **Storage**

Store at 2 to 8°C. Antibody is stable for 24 months.

#### **Precautions**

Anti-TSH-Receptor, B-Chain Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

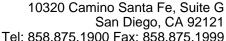
### Anti-TSH-Receptor, B-Chain Antibody - Protein Information

#### **Name TSHR**

## **Synonyms** LGR3

## **Function**

Receptor for the thyroid-stimulating hormone (TSH) or thyrotropin (PubMed:<a href="http://www.uniprot.org/citations/11847099" target="\_blank">11847099</a>, PubMed:<a href="http://www.uniprot.org/citations/12045258" target="\_blank">12045258</a>). Also acts as





a receptor for the heterodimeric glycoprotein hormone (GPHA2:GPHB5) or thyrostimulin (PubMed:<a href="http://www.uniprot.org/citations/12045258" target="\_blank">12045258</a>). The activity of this receptor is mediated by G proteins which activate adenylate cyclase (PubMed:<a href="http://www.uniprot.org/citations/11847099" target="\_blank">11847099</a>). 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**

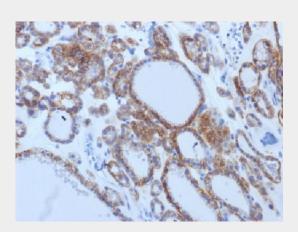
Expressed in thyroide cells (at protein level) (PubMed:11847099). Expressed in the thyroid (PubMed:2610690)

### Anti-TSH-Receptor, B-Chain Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

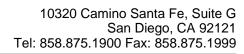
## Anti-TSH-Receptor, B-Chain Antibody - Images



Formalin-fixed, paraffin-embedded human Thyroid Carcinoma stained with TSHRB Monoclonal Antibody (TSHRB/1405).

## Anti-TSH-Receptor, B-Chain Antibody - Background

Thyroid-stimulating hormone (TSH, also known as thyrotropin) is a glycoprotein involved in the control of thyroid structure and metabolism, which stimulates the release of the thyroid hormones. TSH is regulated by thyroid hormone (T3) and various retinoid compounds. TSH binds to the thyroid-stimulating hormone receptor (TSHR), which is cleaved into two subunits, A and B, and plays a major role in regulating thyroid function. The third cytoplasmic loop of TSHR has been identified as critical for its role in regulating inositol phosphate and cAMP formation. In Grave s disease, an autoimmune disorder, TSHR is activated by autoantibodies, which may be stimulated by





the cleavage of the A and B subunits.