

Anti-TSH-Receptor, A-Chain Antibody
Mouse Monoclonal Antibody
Catalog # AH13554**Specification**

Anti-TSH-Receptor, A-Chain Antibody - Product Information

Application	IHC-P, IF, FC
Primary Accession	P16473
Other Accession	160411
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1
Calculated MW	86844

Anti-TSH-Receptor, A-Chain Antibody - Additional Information**Gene ID** 7253**Other Names**

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

Application Note

IHC-P~~N/A
IF~~1:50~200
FC~~1:10~50

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, A-Chain Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-TSH-Receptor, A-Chain Antibody - Protein Information**Name** TSHR**Synonyms** LGR3**Function**Receptor for the thyroid-stimulating hormone (TSH) or thyrotropin (PubMed:[11847099](http://www.uniprot.org/citations/11847099), PubMed:[12045258](http://www.uniprot.org/citations/12045258)). Also acts as

a receptor for the heterodimeric glycoprotein hormone (GPHA2:GPHB5) or thyrostimulin (PubMed:12045258). The activity of this receptor is mediated by G proteins which activate adenylate cyclase (PubMed:11847099). 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

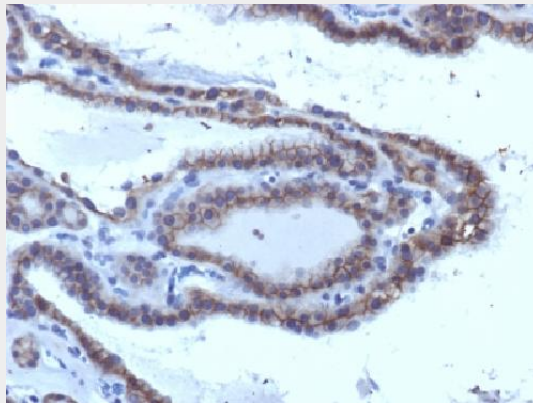
Tissue Location

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

Anti-TSH-Receptor, A-Chain Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-TSH-Receptor, A-Chain Antibody - Images

Formalin-fixed, paraffin-embedded human Thyroid Carcinoma stained with TSHRA Monoclonal Antibody (SPM223).

Anti-TSH-Receptor, A-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 Graves disease, an autoimmune disorder, TSHR is activated by autoantibodies, which may be stimulated by

the cleavage of the A and B subunits.