

Anti-TSH-Receptor, A-Chain Antibody

Mouse Monoclonal Antibody Catalog # AH13554

Specification

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

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW IHC-P, IF, FC <u>P16473</u> <u>160411</u> Human Mouse Monoclonal Mouse / IgG1 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<br \>IF~~1:50~200<br \>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, PubMed: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 thyroide 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.

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

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.