

Product Information

Recombinant Anti-Human tshr Antibody

Cat. No.: **MOM-18518**

This product is for research use only and is not intended for diagnostic use.

Product Overview

Recombinant Mouse Antibody is against Human TSHR, expressed in Chinese Hamster Ovary cells(CHO)

Antigen Description

The TSH receptor, a G protein coupled seven transmembrane receptor, is present on the basal surface of thyroid follicular cells. It is involved in regulating thyrocyte cell growth and function by mediating thyroid stimulating hormone (TSH) action. The TSH receptor is also the target autoantigen in autoimmune thyroid diseases. Autoantibodies to the TSH receptor that stimulate cAMP production in thyrocyte cells, called thyroid stimulating antibodies, are responsible for the hyperthyroidism of Graves' Disease. Another class of autoantibodies that block the binding of TSH to the TSH receptor, thyroid blocking antibodies, may mediate the hypothyroidism associated with Hashimoto's thyroiditis, primary myxoedema, and neonatal hypothyroidism. Studies indicate that these autoantibodies interact primarily with the extracellular region of the TSH receptor. TSH receptor expression has been reported in adipose, adrenal, brain, eye, heart, kidney, skin, thymus, and thyroid. ESTs have been isolated from brain, placenta, and thyroid libraries.

Specific Activity

Tested positive against native antigen.

Target

TSHR

Immunogen

Fusion protein, corresponding to amino acids 402-415 of Human TSH receptor.

Source

Mouse

Species Reactivity

Human

Type

IgG

Expression Host

CHO

Purity

>95.0% as determined by analysis by RP-HPLC.

Applications

Suitable for use in Neut, ELISA, IHC and most other immunological methods.

Storage

Store at -20°C for long-term storage. Store at 2-8°C for up to one month. Avoid freeze/thaw cycles.

ANTIGEN GENE INFORMATION

Gene Name

[TSHR thyroid stimulating hormone receptor \[Homo sapiens \]](#)

Official Symbol

TSHR

Synonyms

TSHR; thyroid stimulating hormone receptor; thyrotropin receptor; LGR3; TSH-R; thyrotropin receptor-I, hTSHR-I; seven transmembrane helix receptor; thyroid-stimulating hormone receptor; thyroid stimulating hormone receptor, isoform 2; CHNG1; hTSHR-I; MGC75129

Gene ID

[7253](#)

mRNA Refseq

[NM_000369](#)

Protein Refseq

[NP_000360](#)

UniProt ID

P16473

Chromosome Location

14q24-q31

Pathway

Arf6 signaling events, organism-specific biosystem; Arf6 trafficking events, organism-specific biosystem; Autoimmune thyroid disease, organism-specific biosystem; Autoimmune thyroid disease, conserved biosystem; Class A/1 (Rhodopsin-like receptors), organism-specific biosystem; G alpha (s) signalling events, organism-specific biosystem; GPCR downstream signaling, organism-specific biosystem;

Function

protein binding; receptor activity; signal transducer activity; thyroid-stimulating hormone receptor activity; thyroid-stimulating hormone receptor activity;