促甲状腺素受体抗体（N 端）

产品货号： mlR0003

英文名称： TSHR (NT)

中文名称： 促甲状腺素受体抗体（N 端）

别　　名： hTSHR I; hTSHRI; LGR 3; LGR3; MGC75129; Thyroid adenoma hyperfunctioning; Thyroid carcinoma with thyrotoxicosis; Thyroid Stimulating Hormone Receptor; Thyrotropin Receptor; Thyrotropin receptor I; TSH R; TSHR; TSHR_HUMAN.

研究领域： 免疫学　神经生物学　信号转导　生长因子和激素　细胞膜受体

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应： Human, Mouse, Rat, Dog, Cow, Sheep,

产品应用： ELISA=1:500-1000
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

分 子 量： 86kDa

细胞定位： 细胞膜

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated synthetic peptide derived from human TSHR:31-100/764 <Extracellular>

亚　　型： IgG

mlbio 酶联生物
Good elisakit producers

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： Store at -20 ° C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20° C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ° C.

PubMed： PubMed

产品介绍： The glycoprotein hormone receptor family consists of the luteinizing hormone receptor, the follicle-stimulating hormone receptor, and the thyroid stimulating hormone(TSH) receptor. TSH, which is released from the pituitary gland, binds to the TSH receptor on thyroid cells to control size and function of the thyroid gland (De Felice et al. 2004). The TSH receptor signals through Gs to elevate intracellular cAMP in the thyroid gland, which regulates iodide uptake, and transcription of thyroglobulin (Tg), thyroid peroxidase (TPO), and sodium-iodide symporter. The TSH receptor also signals Gq and phospholipase C to regulat iodide efflux, H2O2 production, and thyroglobulin iodination. Autoimmunity to the TSH receptor causes hyperthyroidism (Graves disease) or hypothyroidism (Hashimoto thyroiditis) when the autoantibodies function as agonists or antagonists, respectively, at the TSH receptor (Rapoport and McLachlan, 2001; Davies et al., 2002). Millipore’s cloned human TSH receptor-expressing cell line is made in the Chem-10 host, which supports high levels of recombinant TSH receptor expression on the cell surface and contains high levels of the promiscuous G protein to couple the receptor to the calcium signaling pathway. Thus, the cell line is an ideal tool for screening for antagonists of interactions between TSH and its ligands.

Function:

Receptor for thyrothropin. 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).

Subunit:

Interacts (via the PDZ-binding motif) with SCRIB; regulates TSHR trafficking and function.

Subcellular Location:

Cell membrane; Multi-pass membrane protein.

Tissue Specificity:

Expressed in the thyroid.

DISEASE:

Note=Defects in TSHR are found in patients affected by hyperthyroidism with different etiologies. Somatic, constitutively activating TSHR mutations and/or constitutively activating G(s)alpha mutations have been identified in toxic thyroid nodules (TTNs) that are the predominant cause of hyperthyroidism in iodine deficient areas. These mutations lead to TSH independent activation of the cAMP cascade resulting in thyroid growth and hormone production. TSHR mutations are found in autonomously functioning thyroid nodules (AFTN), toxic multinodular goiter (TMNG) and hyperfunctioning thyroid adenomas (HTA). TMNG encompasses a spectrum of different clinical entities, ranging from a single hyperfunctioning nodule within an enlarged thyroid, to multiple hyperfunctioning areas scattered throughout the gland. HTA are discrete encapsulated neoplasms characterized by TSH-independent autonomous growth, hypersecretion of thyroid hormones, and TSH suppression. Defects in TSHR are also a cause of thyroid neoplasms (papillary and follicular cancers).

Similarity:

Belongs to the G-protein coupled receptor 1 family. FSH/LSH/TSH subfamily.

Contains 7 LRR (leucine-rich) repeats.

SWISS:

P16473

Gene ID:

7253

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.