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Anti-TSH Receptor Picoband Antibody

Catalog # ABO10091

Specification

Anti-TSH Receptor Picoband Antibody - Product Information

Application	**WB**
Primary Accession	P16473
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Thyrotropin receptor(TSHR) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TSH Receptor Picoband Antibody - Additional Information

Gene ID 7253

Other Names
Thyrotropin receptor, Thyroid-stimulating hormone receptor, TSH-R, TSHR, LGR3

Calculated MW
86830 MW KDa

Application Details
Western blot, 0.1-0.5 µg/ml, Mouse, Rat, Human

Subcellular Localization
Cell membrane; Multi-pass membrane protein.

Tissue Specificity
Expressed in the thyroid. .

Protein Name
Thyrotropin receptor

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human TSH Receptor (244-277aa KGLEHLKELIARNTWTLKKLPLSLSFLHLTRADL), different from the related mouse sequence by two amino acids, and from the related rat sequence by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-TSH Receptor Picoband 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 Picoband 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 Cytomety
- Cell Culture

Anti-TSH Receptor Picoband Antibody - Images

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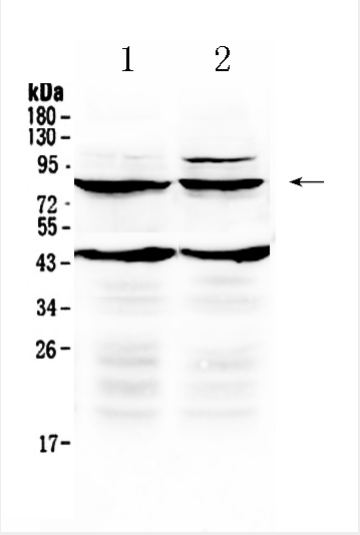

Figure 1. Western blot analysis of TSH Receptor using anti-TSH Receptor antibody (ABO10091). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat brain tissue lysates, Lane 2: mouse brain tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TSH Receptor antigen affinity purified polyclonal antibody (Catalog # ABO10091) at 0.5 Î¼g/mL overnight at 4Â°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for TSH Receptor at approximately 86KD. The expected band size for TSH Receptor is at 86KD.

Anti-TSH Receptor Picoband Antibody - Background

TSHR (Thyroid-Stimulating Hormone Receptor), also called LGR3, is mapped to 14q31.1. The protein encoded by this gene is a membrane protein and a major controller of thyroid cell metabolism. The encoded protein is a receptor for thyrothropin and thyrostimulin, and its activity is mediated by adenylate cyclase. Defects in this gene are a cause of several types of hyperthyroidism. Three transcript variants encoding different isoforms have been found for this gene.