

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TSHR in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 484404
Purification	Protein A or G purified from ascites
Immunogen	NS0 mouse myeloma cell line transfected with human TSHR Accession # P16473
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10 ⁶ cells	HEK293 Human Cell Line Transfected with Human TSH R and eGFP

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Thyroid stimulating hormone receptor (TSH R; also thyrotropin receptor) is an 85 kDa (unglycosylated) member of the G-protein coupled receptor 1 family. Human TSH R is synthesized as a 764 amino acid (aa) precursor that contains a 20 aa signal sequence, a 393 aa extracellular domain (ECD), a 269 aa membrane spanning domain consisting of seven transmembrane segments, and an 82 aa cytoplasmic domain. The ECD contains six leucine-rich repeats (LRR) and six potential sites of N-linked glycosylation. There are two isoforms, long and short, produced by a splicing variant corresponding to aa 253-764 in the long isoform that is missing in the short isoform. Human TSH R is 86-87% aa identical to mouse and rat TSH R. TSH R is the receptor for thyroid stimulating hormone, which plays a central role in controlling thyroid cell metabolism.

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