

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human TSHR in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 484404
<b>Purification</b>	Protein A or G purified from ascites
<b>Immunogen</b>	NS0 mouse myeloma cell line transfected with human TSHR Accession # P16473
<b>Conjugate</b>	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
<b>Formulation</b>	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
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	HEK293 Human Cell Line Transfected with Human TSH R and eGFP

## PREPARATION AND STORAGE

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

## 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.

## PRODUCT SPECIFIC NOTICES

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