

**KX596**

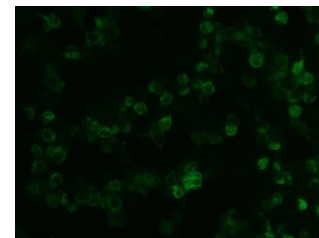
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## Anti Human TSHR Monoclonal Antibody

**Clone No. 2E6**

**Code No.** KX596  
**Target** TSHR  
**Category** GPCR  
**Gene ID** 7253  
**Primary Source** HGNC:12373  
**Synonyms** LGR3; CHNG1; hTSHR-I; MGC75129

**Type** Monoclonal Antibody  
**Immunogen** plasmid vector



[ICC] HEK293T cells overexpressing human TSHR

**Raised in** Mouse  
**Myeloma** P3U1  
**Clone number** 2E6  
**Purification** ProteinG  
**Source** Serum-free medium  
**Isotype** IgG1,k  
**Cross Reactivity**  
**Label** Unlabeled  
**Concentration** 0.25 mg/mL  
**Contents (Volume)** 50 µg (200 µL/vial)  
**Buffer** PBS [containing 2% Block Ace as a stabilizer, 0.1% Proclin as a bacteriostat]  
**Storage** Store at - 20 °C long term, store at 4 °C short term. Avoid repeated freeze-thaw cycles.

**Application** ELISA,IHC

ELISA	WB	IHC	ICC
Not tested	Not tested	Not tested	1.0
IP	FCM	IF	Neutralization
Not tested	1.0	Not tested	Not tested

(µg/mL)

### Reference

1. "Molecular cloning, sequence and functional expression of the cDNA for the human thyrotropin receptor." Nagayama Y. et al. Biochem. Biophys. Res. Commun. 165:1184-1190(1989) [PubMed: 2558651] [Abstract]. Cited for: NUCLEOTIDE SEQUENCE [MRNA] (ISOFORM LONG).
2. "Cloning, sequencing and expression of the human thyrotropin (TSH) receptor: evidence for binding of autoantibodies." Libert F. et al. Biochem. Biophys. Res. Commun. 165:1250-1255(1989) [PubMed: 2610690] [Abstract]. Cited for: NUCLEOTIDE SEQUENCE [MRNA] (ISOFORM LONG).
3. "Cloning, sequencing and expression of human TSH receptor." Misrahi M. et al. Biochem. Biophys. Res. Commun. 166:394-403(1990) [PubMed: 23022121] [Abstract]. Cited for: NUCLEOTIDE SEQUENCE [MRNA] (ISOFORM LONG); VARIANT GLU727

### UniProt Summary

//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). Ref.9

//Subunit structure Interacts (via the PDZ-binding motif) with SCRIB; regulates TSHR trafficking and function. Ref.9 Ref.10

//Subcellular location Cell membrane; Multi-pass membrane protein.

//Polymorphism The Asp727Glu polymorphism is associated with Graves disease in a Russian population. The Glu727 allele and the heterozygous Asp727Glu genotype are related to higher risk of the disease. The Asp727Glu polymorphism significantly ameliorates G(s)alpha protein activation in the presence of the gain-of-function mutation Ala593Asn although it is functionally inert in the context of the wild-type TSHR.

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