10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Human TSHR Antibody (M22)

Catalog # APR11266

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	P16473
Reactivity	Human
Clonality	Monoclonal
Isotype	mIgG1-D265A-TWDD
Calculated MW	86844

Additional Information

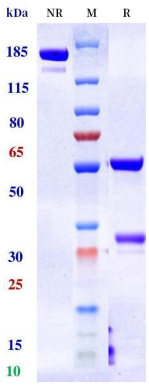
Target/Specificity	TSHR / LGR3
Expression system	CHO

Protein Information

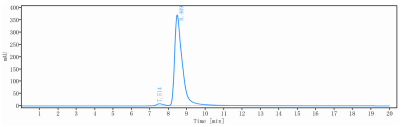
Name	TSHR
Synonyms	LGR3
Function	Receptor for the thyroid-stimulating hormone (TSH) or thyrotropin (PubMed:11847099, PubMed:12045258). Also acts as a receptor for the heterodimeric glycoprotein hormone (GPHA2:GPHB5) or thyrostimulin (PubMed:12045258). TSHR is coupled to G(s) proteins and mediates the activation of adenylate cyclase (PubMed:11847099, PubMed:35940205, PubMed:35940204). This leads to the generation of cyclic adenosine monophosphate (cAMP), which in turn activates protein kinase A (PKA). PKA subsequently phosphorylates downstream targets involved in thyroid hormone biosynthesis and secretion, including thyroid peroxidase (TPO) and the sodium/iodide symporter (NIS) (PubMed:27638195). Additionally, 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)

Images

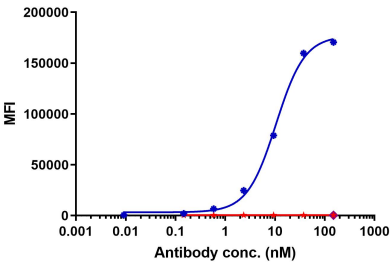
Anti-TSHR Reference Antibody (M22) on SDS-PAGE under



reducing (R) condition. The purity of the protein is greater than 95%.



The purity of Human M22 Antibody is 97.8%, determined by SEC-HPLC.



Human TSHR-FL-HiS-EGFP-HEK293 cell line were stained with Human M22 Antibody and negative control protein respectively, washed and then followed by PE and analyzed with FACS, with the EC50 is 10.44 nM.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.