

Anti-TSHR mIgG2a Antibody(KSAb2)

Product Information

GM-87935AB-10	10 µg
GM-87935AB-100	100 µg
GM-87935AB-1000	1 mg

Antibody Information

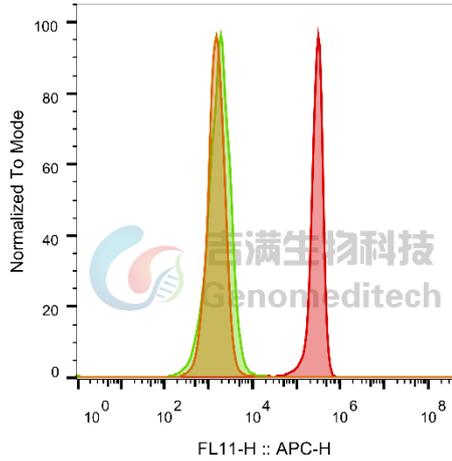
Species Reactivity	Human
Clone	KSAb2
Source/Isotype	Monoclonal mIgG2a/k
Application	Flow cytometry; Activation assay
Specificity	Detects TSHR
Gene	TSHR
Other Names	CHNG1, LGR3, hTSHR-I
Gene ID	7253 (human)
Background	<p>The TSHR (Thyroid Stimulating Hormone Receptor) gene encodes a transmembrane G protein-coupled receptor essential for thyroid function regulation. Expressed on thyroid follicular cell membranes, it binds TSH to activate signaling pathways like cAMP-PKA, controlling thyroid hormone (T3 and T4) synthesis and maintaining metabolic and endocrine balance. TSHR antibodies (TSHR-Ab) are highly specific tools for studying TSHR function and thyroid disease mechanisms. In Graves' disease, stimulatory antibodies (TSAb) mimic TSH, overactivating TSHR and causing excessive hormone secretion, while blocking antibodies (TBAb) inhibit TSH binding, leading to hypothyroidism. TSHR antibodies are valuable in disease diagnosis, drug development, and animal model construction, supporting thyroid disease research and clinical applications.</p>
Storage	Store at 2-8°C short term (1-2 weeks). Store at ≤ -20°C long term. Avoid repeated freeze-thaw.
Formulation	Phosphate-buffered solution, pH 7.2.
Endotoxin	< 1 EU/mg, determined by LAL gel clotting assay

Version:3.2

Data Examples

Flow cytometry

H_TSHR HEK-293 Cell Line (Catalog # GM-C39975) was stained with Anti-TSHR mlgG2a Antibody(KSAb2) (Catalog # GM-87935AB) or isotype control antibody, followed by anti-Mouse IgG APC-conjugated Secondary Antibody.

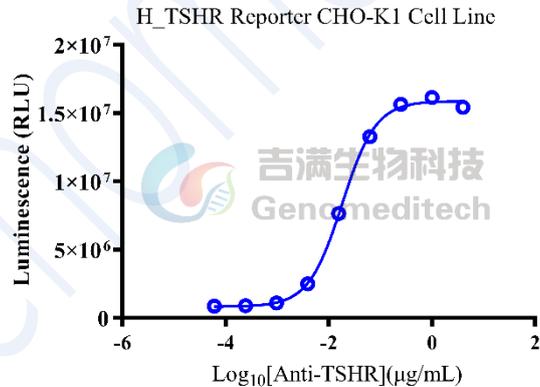


SampleID	Geometric Mean : FL11-H
HEK-293 anti-TSHR+APC-2nd Ab	1502
HEK-293 H_TSHR M_ IgG+APC-2nd Ab	1681
HEK-293 H_TSHR anti-TSHR+APC-2nd Ab	276043

Fig. FACS

Activation assay

Anti-TSHR mlgG2a Antibody(KSAb2) (Catalog # GM-87935AB) stimulates H_TSHR Reporter CHO-K1 Cell Line (Catalog # GM-C39741) Luminescence. EC50 for this effect is 0.01827 $\mu\text{g/mL}$.



	H_TSHR Reporter CHO-K1 Cell Line
EC50	0.01827

Fig. Assay