

Anti-TSHR mIgG2a Antibody(KSAb2)

Product Information

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

Antibody Information

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| 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 mIgG2a Antibody(KSAAb2) (Catalog # GM-87935AB) or isotype control antibody, followed by anti-Mouse IgG APC-conjugated Secondary Antibody.

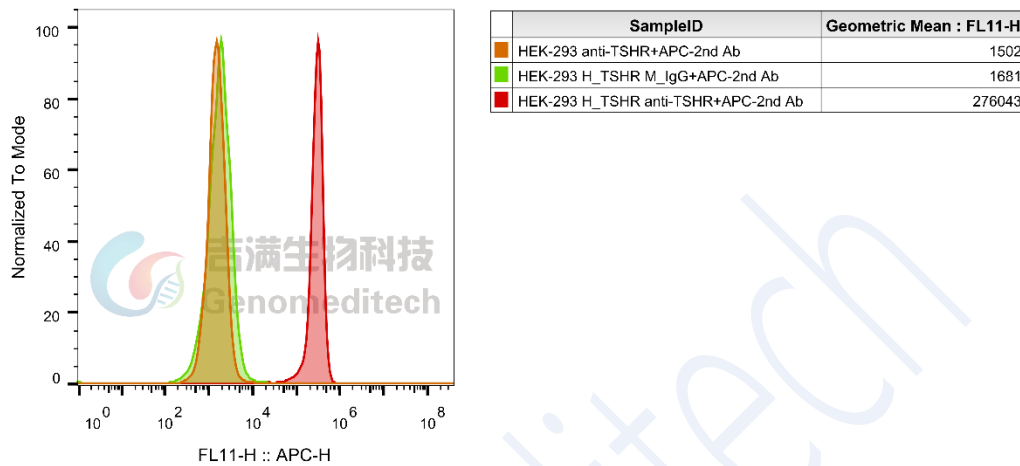


Fig. FACS

Activation assay

Anti-TSHR mIgG2a Antibody(KSAAb2) (Catalog # GM-87935AB) stimulates H_TSHR Reporter CHO-K1 Cell Line (Catalog # GM-C39741) Luminescence. EC50 for this effect is 0.01827 $\mu\text{g/mL}$.

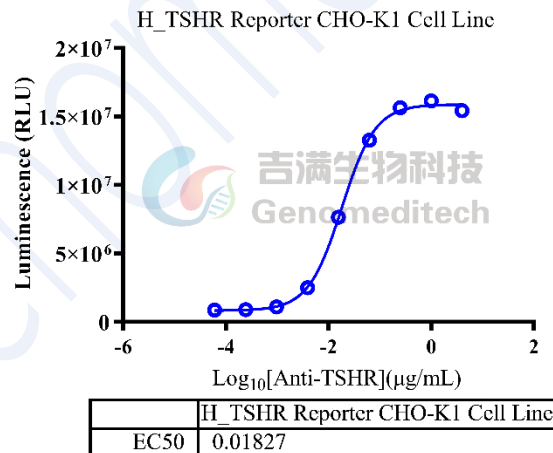


Fig. Assay