

# Anti-H\_TREM2 hIgG4 Antibody

## Product information

GM-48593AB-10	10 µg
GM-48593AB-100	100 µg
GM-48593AB-1000	1 mg

## Antibody Information

Species Reactivity	Human; Cynomolgus
Clone	/
Source/Isotype	Monoclonal Human IgG4 /k
Application	Flow Cytometry
Specificity	Detects TREM2
Gene	TREM2
Other Names	PLOSL2; TREM-2; Trem2a; Trem2b; Trem2c
Gene ID	54209 (human)
Background	<p>The triggering receptor expressed on myeloid cells 2 (TREM2) protein is an innate immune receptor that is expressed on the cell surface of microglia, macrophages, and immature dendritic cells. The TREM2 receptor is a single-pass type I membrane glycoprotein that consists of an extracellular immunoglobulin-like domain, a transmembrane domain, and a cytoplasmic tail. TREM2 interacts with the tyrosine kinase-binding protein DAP12 to form a receptor-signaling complex. In addition, amyloid plaque formation induces expression of TREM2 and amyloid phagocytosis. Loss-of-function mutations in the corresponding TREM2 or DAP12 genes can result in Nasu-Hakola disease, a rare form of progressive presenile dementia that results from polycystic osseous lesions. TREM2 membrane shedding occurs by cleavage at the extracellular site between H157/S158 generating an N-terminal shedded fragment and a membrane bound C-terminal fragment. The immunoglobulin-like ectodomain (ECD) of TREM2 binds various ligands, including lipids, and the AD variant R47H has reduced affinity for apolipoproteins (e.g., APOE) or lipid ligands, suggesting that the increased LOAD risk reflects a partial loss of function (LOF) in lipid recognition and/or lipid-induced signaling.</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:3.1 Revision Date:12/25/2023

## Data Examples

### Flow cytometry

The recommended usage range is 0.5-4 µg per test. H\_TREM2 HEK-293 Cell Line (Catalog # GM-C24478) was stained with Anti-H\_TREM2 hlgG4 Antibody (Catalog # GM-48593AB) or isotype control antibody, followed by anti-Human IgG APC-conjugated Secondary Antibody.

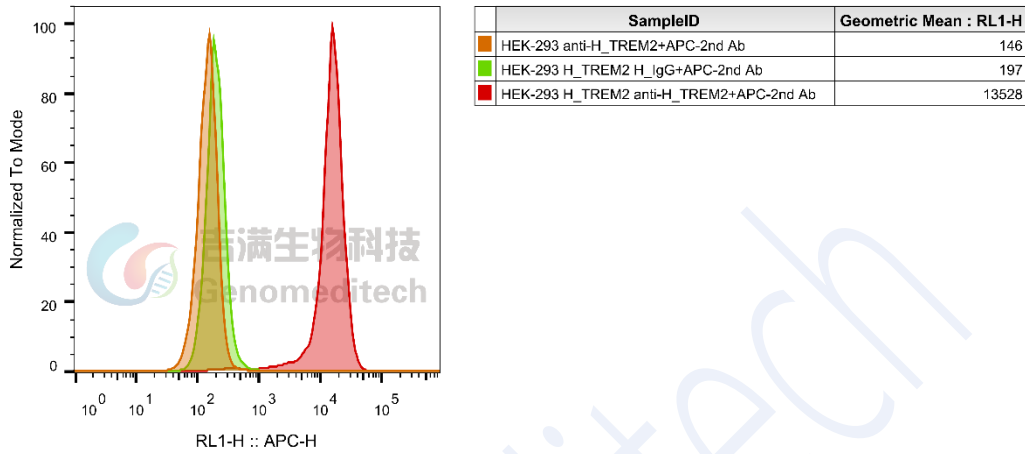


Fig 1. FACS

### Flow cytometry

The recommended usage range is 0.5-4 µg per test. Cynomolgus\_TREM2 CHO-K1 Cell Line (Catalog # GM-C15414) was stained with Anti-H\_TREM2 hlgG4 Antibody (Catalog # GM-48593AB) or isotype control antibody, followed by anti-Human IgG APC-conjugated Secondary Antibody.

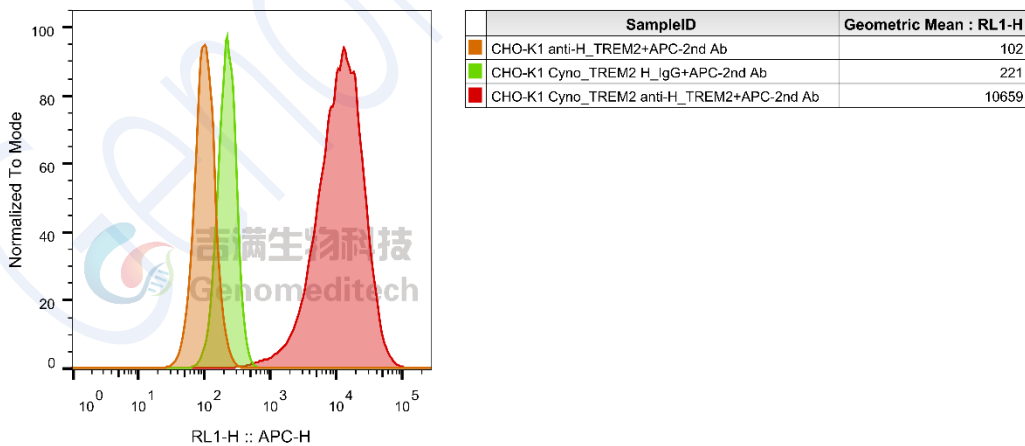


Fig 2. FACS