Genomeditech (Shanghai) Co.,Ltd.
Order: 021-68455258/50432826/50432825
Toll-free: 400 627 9288
Email: service@genomeditech.com

Anti-TNFRSF14(HVEM) hIgG4 Antibody

Product information

GM-49928AB-10	10 μg
GM-49928AB-100	100 μg
GM-49928AB-1000	1 mg

Antibody Information

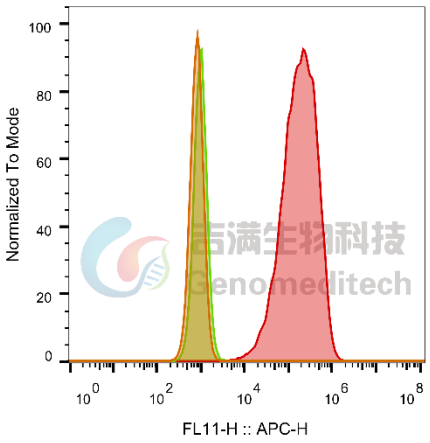
Species Reactivity	Human
Clone	/
Source/Isotype	Monoclonal Human IgG4 /κ
Application	Flow Cytometry; Activation assay
Specificity	Detects TNFRSF14(HVEM)
Gene	TNFSF15
Other Names	ATAR, CD270, HVEA, LIGHTR, TR2
Gene ID	8764
Background	Herpesvirus entry mediator (HVEM), also known as tumor necrosis factor receptor superfamily member 14 (TNFRSF14), is a human cell surface receptor of the TNF-receptor superfamily. The HVEM–LIGHT and HVEM–BTLA-CD160 network is a self-regulating ligand/receptor system that delivers bidirectional survival, proinflammatory and inhibitory signals to T cells, NKT cells and other immune cells. Under homeostatic (non-inflammatory) conditions, HVEM and BTLA interact in cis to provide an intrinsic inhibitory signal that modulates T-cell activation. Upon activation, T cells rapidly and transiently express membrane-bound LIGHT, which binds to and internalizes HVEM. Disruption of the HVEM–BTLA complex leaves BTLA available to signal in trans through HVEM present in neighboring cells. Therefore, after T-cell activation and during the course of T-cell differentiation, the expression of HVEM decreases, while that of BTLA increases. This allows BTLA and transiently expressed LIGHT in activated T cells to interact with HVEM in trans in surrounding cells and deliver bidirectional costimulatory signals. Ligand-induced oligomerization of HVEM leads to the recruitment of TRAF2 (TNF receptor-associated factor 2) and activation of downstream nuclear factor kappa B (NF-κB) in T cells and other immune cells.
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:12/29/2023

Data Examples

Flow cytometry

The recommended usage range is 0.5-4 μg per test. H_TNFRSF14(HVEM) CHO-K1 Cell Line (Catalog # GM-C25498) was stained with Anti-TNFRSF14(HVEM) hIgG4 Antibody (Catalog # GM-49928AB) or isotype control antibody, followed by anti-Human IgG APC-conjugated Secondary Antibody.

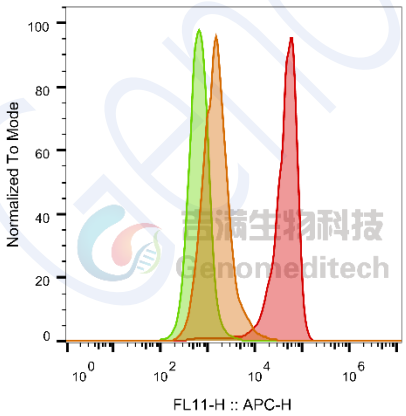


SampleID	Geometric Mean : FL11-H
CHO-K1 anti-TNFRSF14+APC-2nd Ab	826
CHO-K1 H_TNFRSF14 H_IgG+APC-2nd Ab	1009
CHO-K1 H_TNFRSF14 anti-TNFRSF14+APC-2nd Ab	172837

Fig 1. FACS

Flow cytometry

The recommended usage range is 0.5-4 μg per test. H_HVEM Reporter Jurkat Cell Line (Catalog # GM-C25497) was stained with Anti-TNFRSF14(HVEM) hIgG4 Antibody (Catalog # GM-49928AB) or isotype control antibody, followed by anti-Human IgG APC-conjugated Secondary Antibody.

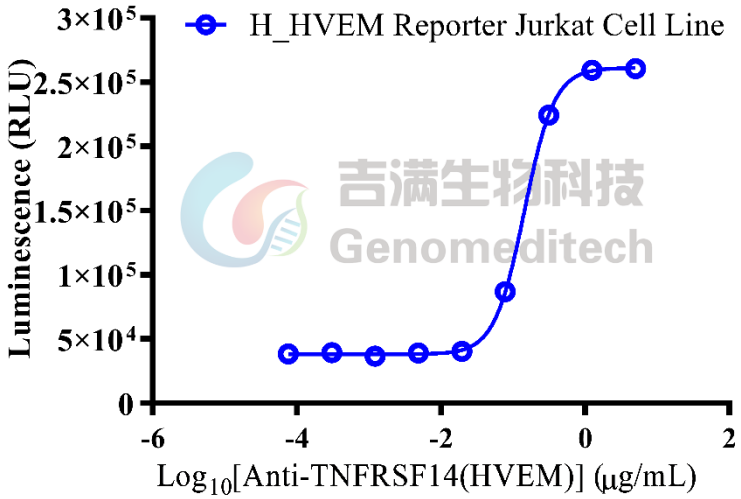


SampleID	Geometric Mean : FL11-H
Jurkat anti-TNFRSF14(HVEM)+APC-2nd Ab	1517
H_HVEM Reporter Jurkat H_IgG+APC-2nd Ab	662
H_HVEM Reporter Jurkat anti-TNFRSF14(HVEM)+APC-2nd Ab	41037

Fig 2. FACS

Activation assay

Anti-TNFRSF14(HVEM) hIgG4 Antibody (Catalog # GM-49928AB) stimulates H_HVEM Reporter Jurkat Cell Line (Catalog # GM-C25497) Luminescence. EC50 for this effect is 0.1438 μg/mL.



	H_HVEM Reporter Jurkat Cell Line
EC50	0.1438

Fig 3. Assay