Data Sheet (Cat.No.TMAB-01068)

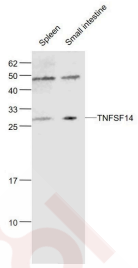
Anti-LIGHT/TNFSF14 Polyclonal Antibody

Product Details

Ig Type:	IgG
Reactivity:	Mouse (predicted:Human,Rat)
Molecular Weight:	Theoretical: 26 kDa. Actual: 26 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	Sample: Spleen (Mouse) Lysate at 40 μg Small intestine (Mouse) Lysate at 40 μg Primary: Anti-TNFSF14 (TMAB-01068) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 26 kDa Observed band size: 26 kDa



Application:	ELISA,WB
Recommended	WB: 1:500-2000; ELISA: 1:500-5000

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human TNFSF14
Antigen Species:	Human
Gene ID:	8740
Uniprot ID:	O43557
Synonyms:	TR2;LTg;LIGHT;CD258;HVEML;tumor necrosis factor (ligand) superfamily, member 14

Research Background

LIGHT protein is a type II transmembrane protein and a tumor necrosis factor (TNF) ligand superfamily member (TNFSF14). LIGHT is expressed on activated T cells and immature dendritic cells and its receptors have been identified as lymphotoxin-Beta receptor (LTBetaR) and the herpesvirus entry mediator (HVEM), both of which lack the

cytoplasmic sequence termed as "death domain." LIGHT is first identified as HVEM ligand (HVEM-L) and a deterrent to herpesvirus infection according to its ability to compete with HSV glycoprotein D for HVEM binding. As a T cell-derived costimulatory ligand, TNFSF14 plays a crucial role in T cell activation and proliferation by LIGHT-LTBetaR interaction, and it is necessary and sufficient for LIGHT-mediated apoptosis of tumor cells. Additionally, recent studies also establish a direct role for LIGHT in NK activation/expansion via LIGHT-HVEM interaction, and thus breaking T-cell tolerance at the tumor site. Accordingly, LIGHT is suggested to be involved in CTL-mediated tumor rejection, allograft rejection and graft versus host disease. Although known as lymphotoxin-Gamma, LIGHT plays a minimal role in lymphoid tissue development in contrast with LT-Alpha and Beta. This protein was also demonstrated to inhibit TNF-Alpha-mediated but not Fas- or TRAIL-mediated apoptosis of human primary hepatocytes.

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