Recombinant Human TNFSF14 Protein, His-tagged

Cat. No. TNFSF14-150H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human TNFSF14 Protein with His tag was expressed in E. coli.
Species	Human
Source	E.coli
Description	Tumor necrosis factor superfamily member 14 (TNFSF14), also known as CD258 and LIGHT, is a cell surface type II transmembrane protein that is expressed as a homotrimer. The extracellular region can be cleaved to generate a soluble cytokine. TNFSF14 is a ligand for the receptors herpesvirus entry mediator (HVEM) and lymphotoxin receptor (LTR). TNFSF14 is expressed on activated NK cells, activated T cells, activated monocytes, immature DCs, and mast cells. TNFSF14 interactions with HVEM induce potent co-stimulatory signaling in T cells and trigger NK cells to produce IFN-γ via NF-κB RelA/p50 pathway signaling. TNFRSF14 produced by tumor-sensing NK cells aids in DC maturation, enabling de novo anti-tumor adaptive immune responses. TNFSF14-HVEM interactions are considered the main drivers of anti-tumor immune responses, whereas TNFSF14-LTR interactions have been characterized as maintaining the infrastructure that supports the anti-tumor response via lymphoid development and cancer cells' susceptibility to the immune response. TNFSF14 induces the normalization of tumor vasculature, sensitizes tumor cells to IFN-γ-mediated apoptosis, and results in a more inflamed tumor microenvironment (TME). Due to its effects on the TME and anti-tumor immune cell responses, TNFSF14 is being investigated as a target for immunotherapeutic intervention in cancer. TNFSF14 has also been implicated in the development and pathogenesis of

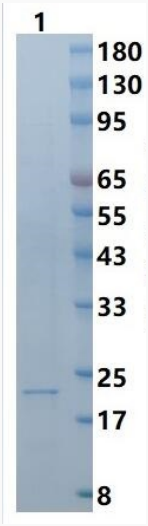
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	inflammatory bowel disease and airway remodeling leading to asthma.
Molecular Mass	~20 kDa
AA Sequence	LQLHWRLGEMVTRLPDGPAGSWEQLIQERRSHEVNPAAHLTGANSSLTGSGGPLL WETQLGLAFLRGLSYHDGALVVTKAGYYYIYSKVQLGGVGCPLGLASTITHGLYKRT PRYPEELELLVSQQSPCGRATSSSRVWWDSSFLGGVVHLEAGEKVVVRVLDERLV RLRDGTRSYFGAFMV
Purity	Transferred into competent cells and the supernatant was purified by NI column affinity chromatography and the purity is > 85% (by SDS-PAGE).
Notes	For research use only, not for use in diagnostic procedure.
Storage	Store at 4 centigrade short term. Aliquot and store at -20 centigrade long term. Avoid freeze-thaw cycles.
Storage Buffer	PBS, 4M Urea, pH7.4

GENE INFORMATION

Gene Name	TNFSF14 tumor necrosis factor (ligand) superfamily, member 14 [Homo sapiens (human)]
Official Symbol	TNFSF14
Synonyms	TNFSF14; tumor necrosis factor (ligand) superfamily, member 14; tumor necrosis factor ligand superfamily member 14; CD258; HVEM L; LIGHT; LTg; delta transmembrane LIGHT; herpesvirus entry mediator A; herpesvirus entry mediator ligand; herpesvirus entry mediator-ligand; herpes virus entry mediator ligand; ligand for herpesvirus entry mediator; tumor necrosis factor receptor-like 2; tumor necrosis

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	factor superfamily member LIGHT; TR2; HVEML;
Gene ID	8740
mRNA Refseq	NM_003807
Protein Refseq	NP_003798
MIM	604520
UniProt ID	O43557
SDS-PAGE	

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