

# Recombinant Human TNFSF14 Protein, His-tagged

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

## SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| <b>Product Overview</b> | Recombinant Human TNFSF14 Protein with His tag was expressed in E. coli.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Description</b>      | <p>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-<math>\gamma</math> via NF-<math>\kappa</math>B 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-<math>\gamma</math>-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</p> |

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inflammatory bowel disease and airway remodeling leading to asthma.

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

## GENE INFORMATION

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | TNFSF14 tumor necrosis factor (ligand) superfamily, member 14 [ Homo sapiens (human) ]                                                                                                                                                                                                                                                                                                                         |
| <b>Official Symbol</b> | TNFSF14                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Synonyms</b>        | 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

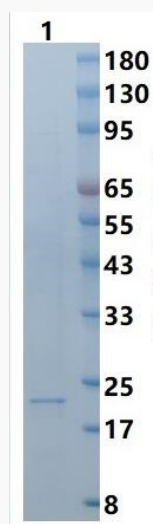
**mRNA Refseq** NM\_003807

**Protein Refseq** NP\_003798

**MIM** 604520

**UniProt ID** O43557

**SDS-PAGE**



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