

AR31159PU-N

Human CD70 - Purified

Alternate names:

CD27 ligand, CD27L, CD27LG, TNFSF7, Tumor necrosis factor ligand superfamily member 7

Quantity:

50 µg

Background:

CD27 Ligand, a type II transmembrane protein, is a member of the TNF superfamily. It is expressed on activated T and B lymphocytes as well as NK cells. CD27L and its receptor (CD27) regulate the immune response by promoting T-cell expansion and differentiation, as well as NK enhancement. CD27 signaling can act as a co-stimulatory effector to sustain the survival of CD8+ T cells, primarily by inducing increased expression of the IL-2 gene. Full length human CD27L is a 193 amino acid protein, consisting of a 17 amino acid cytoplasmic domain, a 21 amino acid transmembrane domain, and a 155 amino acid extracellular domain. Human soluble CD27L corresponds to the 155 amino acid extracellular domain of the full length CD27L protein. The provided human sCD27L protein contains the extracellular domain plus an N-terminal His-Tag.

Uniprot ID:

[P32970](#)

NCBI:

[NP_001243.1](#)

GeneID:

[970](#)

Species:

Human

Source:

CHO cells

Format:

State: Lyophilized purified protein

Purity: >95% by SDS-PAGE & HPLC analysis

Buffer System: PBS without stabilizers

Reconstitution: We recommended a quick spin followed by reconstitution in water to a concentration of 0.1-1.0 mg/ml.

This solution can be diluted into other aqueous buffers and stored at 4°C for one week or at -20°C for future use.

Description:

Human soluble CD27L corresponds to the 155 amino acid extracellular domain of the full length CD27L protein. The provided human sCD27L protein contains the extracellular domain plus an N-terminal His-Tag.

AA Sequence:

HHHHHHHHHPSPGGSGGQRFQAQQQLPLESLGWDVAELQLNHTGPQQDPR
LYWQGGPALGRSFLHGPELDKGQLRIHRDGIYMVHIQVTLAICSSTTASR
HHPTTLAVGICSPASRSISLLRLSFHQGCTIASQRLTPLARGDTLCTNLT GTLLPSRNTDETFEGVQWVRP

Biological Activity: Determined by its ability to stimulate human IL-8 production by human PBMC using a concentration range of 10.0-25.0 ng/ml.

Note: Results may vary with PBMC donors.

Molecular weight: 18.8 kDa (155 amino acids)

Add. Information:

Centrifuge vials before opening!

Storage:

Store lyophilized at 2-8°C for 6 months or at -20°C long term.
After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

1. Croft M. The role of TNF superfamily members in T-cell function and diseases. Nat Rev Immunol. 2009 Apr;9(4):271-85. doi: 10.1038/nri2526. PubMed PMID: 19319144.
2. Nolte MA, van Olfen RW, van Gisbergen KP, van Lier RA. Timing and tuning of CD27-CD70 interactions: the impact of signal strength in setting the balance between adaptive responses and immunopathology. Immunol Rev. 2009 May;229(1):216-31. doi: 10.1111/j.1600-065X.2009.00774.x. PubMed PMID: 19426224.
3. Goodwin RG, Alderson MR, Smith CA, Armitage RJ, VandenBos T, Jerzy R, et al. Molecular and biological characterization of a ligand for CD27 defines a new family of cytokines with homology to tumor necrosis factor. Cell. 1993 May 7;73(3):447-56. PubMed PMID: 8387892.