

Recombinant Human soluble CD40 Ligand/TNFSF5

#R00083

Size: 10 µg/100 µg/500 µg

Stability & Storage

- Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt, -20 to -70 °C as supplied.
 - 1 month, 2 to 8 °C under sterile conditions after reconstitution.
 - 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

CD40 ligand is a 261 amino acid type II transmembrane glycoprotein belonging to the TNF family and can be cleaved into two chains: the CD40 ligand membrane form and CD40 ligand soluble form. It is primarily expressed on activated CD4+ T lymphocytes, and also found in other types of cells, like NK cells, mast cells, basophils and eosinophils. In total CD40 ligand has three binding partners: CD40, α5β1 integrin and αIIbβ3. It mediates a range of activities on B cells including induction of activation-associated surface antigen, entry into cell cycle, isotype switching and Ig secretion and memory generation. CD40-CD40L interaction also plays important roles in monocyte activation and dendritic cell maturation.

AA Sequence

MQKGDQNPQIAAHVISEASSKTTSVLQWAEKGYITM
SNNLVTLENGKQLTVKRQGLYYIYAQVTFCSNREASS

QAPFIASLWLKSPGRFERILLRAANTHSSAKPCGQQS
IHLGGVFELQPGASVFNVTDP SQVSHGTGFTSFGLL
KL

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-0.3 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	TNFSF5, sCD40L, CD154, gp39, T-BAM, TNF-related Activation Protein, TRAP
Accession	P29965
GeneID	959
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 16.3 kDa, a single non-glycosylated polypeptide chain containing 149 amino acids.
Purity	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by the dose-dependent stimulation of IL-8 production by human PBMC

	is less than 5-10 ng/ml.
Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.0.
Endotoxin	Less than 1 EU/µg of rHusCD40L as determined by LAL method.
