

# Mouse CD40 Ligand (TNFSF5) Recombinant Protein, eBioscience™

Product Details	
Size	25 µg
Species	Mouse
Amino acid sequence	Mouse CD40L, amino acids Met112-Leu250 (Accession # P27548)
Molecular weight	16 kDa
Class	Recombinant
Type	Protein
Purity	>98% by SDS-PAGE and HPLC
Endotoxin concentration	<0.1 ng/µg
Activity	ED50 = 0.1 µg/mL; as measured by the induction of TNF-alpha and MIP-1alpha production by mouse splenocytes.
Conjugate	Unconjugated
Form	Lyophilized
Storage conditions	-20°C

Applications	Tested Dilution	Publications
Functional Assay (FN)	Assay-Dependent	-
Control (Ctrl)	Assay-Dependent	-
Miscellaneous PubMed (Misc)	-	1 Publication

## Product Specific Information

**Description:** CD40 ligand (CD40L, also known as CD154, TRAP or gp39) is a membrane glycoprotein expressed on activated CD4+ T-cells, NK cells, mast cells, basophils and eosinophils. The CD40-CD40L interaction stimulates B cell immune responses including cell surface antigen expression, cell cycle activation, Ig isotype switching, Ig secretion and memory generation. The CD40-CD40L interaction also plays important roles in monocyte and dendritic cell activation, T-cell co-stimulation and cytokine production. It has been reported that the CD40-CD40L interaction is involved in the pathogenesis of amyloid pathology in Alzheimer disease. E. coli-produced recombinant mouse CD40L is a non-glycosylated polypeptide of 149 amino acids comprising the soluble extracellular domain of CD40L.

**Applications Reported:** Recombinant mouse CD154 (CD40 Ligand) is biologically active and can promote TNFa and MIP-1a production by mouse splenocytes in culture.

**Applications Tested:** The ED50 of this protein, as measured by induction of TNFa and MIP-1a production by mouse splenocytes, is less than 0.1 µg/mL.

**Source:** E. coli (amino acids Met112-Leu250; accession # P27548).

**Bioactivity:** The ED50 of this protein, as measured by induction of TNFa and MIP-1a production by mouse splenocytes, is less than 0.1 µg/mL.

**Endotoxin:** Less than 0.1 ng/ug cytokine as determined by the LAL assay. **Purity:** >98% as determined by SDS-PAGE and HPLC.

**Molecular Weight:** 16 kDa.

**Storage and handling:** Use in sterile environment. Reconstitute in water to a concentration of 0.1-1.0 mg/mL. Do not vortex.

Store lyophilized protein at less than or equal to -20°C. Reconstituted protein solution can be stored with carrier protein (e.g., 0.1% BSA) at less than or equal to -20°C.

1 Reference

Miscellaneous PubMed (1)

The Journal of clinical investigation	Year
Myeloid loss of Beclin 1 promotes PD-L1hi precursor B cell lymphoma development.	2019
Authors: Tan P,He L,Xing C,Mao J,Yu X,Zhu M,Diao L,Han L,Zhou Y,You MJ,Wang HY,Wang RF	

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