

| For Researc | h Use On | ly. Not f | or Use i | n Diagnosti | c Procedu | res. |
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| MW (kDa): 16 | UniProt ID: #P29965 | Entrez-Gene Id: 959 |
|------------------------|-------------------------------|---|
| Background | | CD40 Ligand (CD40L), a member of the TNF superfamily of ligands, is expressed as either a membrane- bound or soluble homotrimer (1). Both membrane-bound and soluble forms of CD40L have biological activity (1,2). CD40L is expressed primarily on activated T cells; however, mast cells, basophils, and NK cells may also express CD40L (1). CD40L functions as an important T cell co-stimulatory molecule and enhances T-dependent B cell responses (1,2). CD40L binds CD40, which is a receptor expressed on B cells, dendritic cells, and macrophages (1). Binding of CD40L to CD40 leads to the recruitment of TRAF proteins (TRAFs 2,3,5, and 6) resulting in the activation of the JNK and NF-kB pathways (1,2). |
| Endotoxin | | Less than or equal to 1 EU / 1 μg hCD40L. |
| Purity | | A greater than 95% purity was determined by SDS-PAGE. |
| Source / Purifica | ation | Recombinant human CD40L was expressed in <i>E. coli</i> and is supplied in a lyophilized form. |
| Bioactivity | | The bioactivity of recombinant hCD40L was determined by measuring the secreted embryonic alkaline phosphatase (SEAP) activity in HEK-blue [™] CD40L responsive indicator cells. The ED ₅₀ of each lot is between 5-50 ng/ml. |
| Background Ref | ferences | 1. van Kooten, C. and Banchereau, J. (2000) <i>J Leukoc Biol</i> 67, 2-17. 2. Peters, A.L. et al. (2009) <i>Semin Immunol</i> 21, 293-300. |
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