**Proteins** 



# **Product** Data Sheet

# CD30L Protein, Cynomolgus (HEK293, Fc)

Cat. No.: HY-P77321

Synonyms: TNF superfamily member 8; CD153; CD30 Ligand; TNFSF8

Cynomolgus Species: HEK293 Source:

Accession: G7P2F1 (Q63-D234)

Gene ID:

Molecular Weight: Approximately 59 kDa

חח	$\mathbf{a}$		_	-	т.	FC
PК	401	12	-	к		IES

Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu g/mL$ in ddH <sub>2</sub> O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

## **DESCRIPTION**

Background

CD30 Ligand (CD30L) is a B cell surface antigen and a ligand for CD30 (TNFRSF8), playing an inhibitory role in CD40-mediated immunoglobulin class switching<sup>[1]</sup>.

CD30L is a type II membrane-associated glycoprotein belonging to the tumor necrosis factor (TNF) family, structurally related to tumour necrosis superfamily members TNF alpha, TNF beta, and CD40<sup>[1][3]</sup>.

CD30L enhances cell proliferation of some lymphoma cell lines, while to induce cell death and reduce cell proliferation of other lymphoma cell lines to play a pathophysiologic role in Hodgkin's and some non-Hodgkin's lymphomas. CD30L also enhances release of cytokine IL-6, TNF, LT-a<sup>[2]</sup>.

CD30L exerts pleiotropic effects on normal and malignant lymphoid cells, including death, differentiation, or cell division regulation[3].

CD30L is mainly expressed on activated T cells, B cells, macrophages and DCs, while CD30/CD30L mainly expressed on the surface of activated CD4+ T cells in the lamina propria (LP), especially at the early stage of Th17 cell differentiation. CD30L deficiency could inhibit Th17 cell differentiation and production of IL-17A in the intestinal mucosa<sup>[4]</sup>.

CD30L acts as a pro-inflammatory cytokines, is involved in the adaptive immune response in ulcerative colitis (UC), the level of which shows positive correlation with the severity of UC<sup>[5]</sup>.

### **REFERENCES**

- [1]. Cerutti A, et al. CD30 is a CD40-inducible molecule that negatively regulates CD40-mediated immunoglobulin class switching in non-antigen-selected human B cells. Immunity. 1998 Aug;9(2):247-56.
- [2]. Gruss H-J, et al. CD30 ligand, a member of the TNF ligand superfamily, with growth and activation control CD30+ lymphoid and lymphoma cells. Leuk Lymphoma. 1996 Feb;20(5-6):397-409.
- [3]. Pera MF, et al. CD30 and its ligand: possible role in regulation of teratoma stem cells. APMIS. 1998 Jan;106(1):169-72; discussion 173.
- [4]. Wang X, et al. CD30L/CD30 signaling regulates the formation of the tumor immune microenvironment and inhibits intestinal tumor development of colitis-associated colon cancer in mice. Int Immunopharmacol. 2020 Jul;84:106531.
- [5]. Mei C, et al. CD30L+ classical monocytes play a pro-inflammatory role in the development of ulcerative colitis in patients. Mol Immunol. 2021 Oct;138:10-19.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA