

## Monoclonal Anti-human CD40L /CD154

**Product reference: DDX0141**

**Description**

CD40 ligand also known as TRAP, gp39, TNFSF5, is a 261 amino acid type II transmembrane glycoprotein belonging to the TNF superfamily. CD40 ligand is expressed predominantly on activated CD4+ T cells and is also found on other cell types, including NK cells, mast cells, basophils and eosinophils. Genetic alterations in the CD40L results in the absence of a functional molecule on activated T cells and are responsible for the occurrence of X-linked hyper-IgM syndrome. LL2 clone was produced by immunizing mice with L cells transfected with human CD40L. Addition of anti-CD40L mAb LL2 enhanced proliferation of MT9 and FS35 T cell lines in the presence of IL-2 and increased the secretion of IFN- $\gamma$  by MT9 cells and of IL-10, IL-5 and IL-4 by FS35 cells cultured with IL-2. LL2 completely blocks CD40-CD40L interaction, can mimic T cell-induced CD40 triggering on B cells and activates T cells.

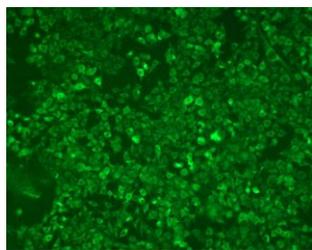
*(Hermann P et al, 1995, EJI, 25 (10), 2972-2977; Razanajaona D et al, 1996, J Immunol., 157(4):1492-8 ; Fournier N et al, 2000 J Immunol., 165: 1197-1209; Henn et al, 2001, Blood, 98 (4), 1047-1054).*

<b>Clone:</b>	<b>LL2</b>
<b>Species:</b>	mouse
<b>Specificity:</b>	human CD40L
<b>Immunogen:</b>	Chimeric human CD40L-Ig transfected COS7 cells
<b>Species cross-reactivity:</b>	nd
<b>Isotype:</b>	IgG1
<b>Purification:</b>	QMA Hyper D ion exchange chromatography
<b>Formulation/size:</b>	<b>Purified:</b> 100 $\mu$ g in 200 $\mu$ l / 50 $\mu$ g in 100 $\mu$ l Tris-NaCl pH 8 <b>Coupled:</b> 100 $\mu$ g in 200 $\mu$ l / 50 $\mu$ g in 100 $\mu$ l PBS 50% glycerol

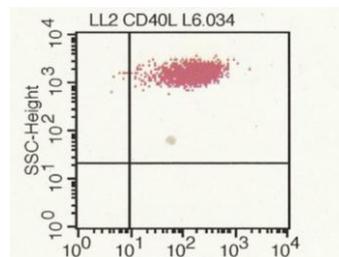
**Available formats:** (coupled formats available on request)

Reference N°		Format	Application tested
50 $\mu$ g	100 $\mu$ g		
DDX0141P-50	DDX0141P-100	purified	Flow cytometry, IF, T cell activation, block CD40-CD40L interaction, ELISA for sCD154 detection
DDX0141A647-50	DDX0141A647-100	Alexafluor®647	IF, flow cytometry

**Applications tested:** IF, Flow cytometry, CD40-CD40L blocking

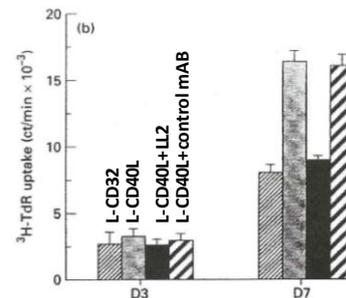


IF staining of hCD40L-transfected cells with LL2 clone



FACS staining of hCD40L-transfected L cells with LL2 clone

*LL2 inhibits the stimulatory effect of the CD40L-transfected L cells on synovial fibroblasts*  
Rissoan et al, Clin Exp Immunol. 1996, 106(3):481-90.



**Usage recommendation:** \*This monoclonal antibody may be used between 5-20  $\mu$ g/ml.  
\*Optimal dilution should be determined by each laboratory for each application.  
\*Coupled antibody: to maintain RT before use.

**Aliquot storage conditions:** -20°C. **KEEP CONTENTS STERILE: no preservative.**  
**Purified antibodies:** avoid repeated freeze/thaw cycles.  
**Coupled antibodies:** glycerol protects from freezing.

**Not for use in Humans. For research purpose only**