

## Monoclonal Anti-human CD40

**Product reference: DDX0131**

### Description

CD40 (48 to 50 kDa) is a transmembrane glycoprotein mainly expressed on the surface of B cells and also expressed on monocytes, dendritic cells, and thymic epithelium. CD40 is a member of the tumor necrosis factor (TNF) receptor superfamily, which includes the low affinity nerve growth factor (NGF) receptor and CD95/Fas. CD40 is the receptor for CD40 ligand. CD40L (CD40L, CD154, gp39, and TRAM) belongs to the TNF gene family and is expressed more widely than CD40, predominantly on activated CD4<sup>+</sup> T cells. Following interaction with CD40 ligand, CD40 mediates a number of major immunoregulatory functions, central to the control of thymus dependent humoral immunity and may be critical in the development of cell mediated immune responses. Other biological actions include B cell homotypic adhesion, proliferation, immunoglobulin isotype switch, and secretion. Activation of CD40 has also been shown to inhibit the growth of certain B cell lymphomas and to induce the death of transformed cells of mesenchymal or epithelial origin.

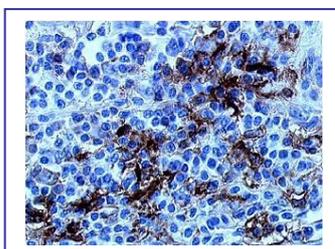
(Vallé A. *et al*, 1989; *Eur. J. Immunol.*, 19: 1463-1469; O' Sullivan B. *et al*, 2003; *Crit. Rev. Immunol.*, 23: 83-107)

<b>Clone:</b>	<b>mAb 89</b>
<b>Species:</b>	mouse
<b>Specificity:</b>	human CD40
<b>Immunogen:</b>	anti- $\mu$ activated tonsillar human B 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:

Reference N°		Format	Application tested
50 $\mu$ g	100 $\mu$ g		
DDX0131P-50	DDX0131P-100	purified	Surface flow cytometry, IHC paraffin, cell activation
DDX0131A488-50	DDX0131A488-100	Alexa-fluor® 488	Flow cytometry, IF

### Applications tested:



*IHC staining on Bouin paraffin lymph node section. Human CD40 stained with mAb 89.*

**Usage recommendation:**

- \*This monoclonal antibody may be used between 1-10  $\mu$ g/ml. 10ng/ml for cellular activation.
- \*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**