

#15094 Store at -20°C

CD40 Ligand (D5J9Y) Rabbit mAb



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IHC-P	H	Endogenous	25-30 (membrane bound); 17 (soluble)	Rabbit IgG	#P29965	959

Product Usage Information

Application

Western Blotting
Immunoprecipitation
Immunohistochemistry (Paraffin)

Dilution

1:1000
1:50
1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. *Do not aliquot the antibody.*

For a carrier free (BSA and azide free) version of this product see product #73222.

Specificity / Sensitivity

CD40 Ligand (D5J9Y) Rabbit mAb recognizes endogenous levels of total membrane bound and soluble CD40 ligand protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the extracellular domain of human CD40 ligand protein.

Background

CD40 ligand (CD40L), also known as CD154, TRAP, and gp39, is the ligand for the TNF receptor family member CD40 (1-6). CD40L is expressed either as a soluble cytokine or as a homotrimeric transmembrane protein. CD40L primarily expressed on the surface of T-cells, but has also been reported in blood platelets, mast cells, basophils, NK cells, and B-cells. It plays an important role in stimulating B-cell cell proliferation and survival and promotes immunoglobulin class switching and secretion of IgE (7). Signals generated by CD40 vary depending on cell type and include activation of MAPK pathways as well as NF-κB (8-11). Mutations within the *CD40L* gene are associated with X-linked hyper-IgM syndrome characterized by high serum levels of IgM and decreased levels of other isotypes (12). The CD40L/CD40 pathway is an important area of interest in the study of cancer, vascular diseases, and inflammatory disorders (13-15).

Background References

- Noelle, R.J. et al. (1992) *Proc Natl Acad Sci USA* 89, 6550-4.
- Graf, D. et al. (1992) *Eur J Immunol* 22, 3191-4.
- Armitage, R.J. et al. (1992) *Nature* 357, 80-2.
- Hollenbaugh, D. et al. (1992) *EMBO J* 11, 4313-21.
- Gauchat, J.F. et al. (1993) *FEBS Lett* 315, 259-66.
- Castle, B.E. et al. (1993) *J Immunol* 151, 1777-88.
- Spriggs, M.K. et al. (1992) *J Exp Med* 176, 1543-50.
- Li, Y.Y. et al. (1996) *J Immunol* 157, 1440-7.
- Pearson, L.L. et al. (2001) *Int Immunol* 13, 273-83.
- Berberich, I. et al. (1996) *EMBO J* 15, 92-101.
- Aruffo, A. et al. (1993) *Cell* 72, 291-300.
- Berberich, I. et al. (1994) *J Immunol* 153, 4357-66.
- Korniluk, A. et al. (2014) *Tumour Biol* 35, 9447-57.
- Hassan, G.S. et al. (2012) *Immunobiology* 217, 521-32.
- Zhang, B. et al. (2013) *Immunol Lett* 153, 58-61.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key**WB:** Western Blotting **IP:** Immunoprecipitation **IHC-P:** Immunohistochemistry (Paraffin)**Cross-Reactivity Key****H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected**Trademarks and Patents**

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