

**CD83 (D8V7V) Rabbit mAb**

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<b>Applications:</b> W, IP	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 23-65	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #Q01151	<b>Entrez-Gene Id:</b> 9308
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**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation

**Dilution**

1:1000  
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.

**Specificity/Sensitivity**

CD83 (D8V7V) Rabbit mAb recognizes endogenous levels of total CD83 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro63 of human CD83 protein.

**Background**

CD83 is a single-transmembrane protein with a calculated molecular weight (MW) of 23 kDa, but due to heavy and differential glycosylation, its apparent MW ranges from 23 to 70 kDa. CD83 is predominantly expressed on mature dendritic cells (DCs) and has been used as a DC activation/maturation marker as its increased expression is correlated with upregulation of HLA class II antigen expression on DCs (1-3). CD83 is also expressed at a low level on lymphocytes and is upregulated upon lymphocyte activation (4,5). Thymic epithelial cells also express CD83, which is required for normal CD4<sup>+</sup> T cell development (6,7). CD83 is also expressed as a soluble form (sCD83) that can be found in serum of healthy adults (8). sCD83 has been shown to negatively regulate immune response by lymphocytes (9,10).

**Background References**

1. Zhou, L.J. et al. (1992) *J Immunol* 149, 735-42.
2. Prechtel, A.T. and Steinkasserer, A. (2007) *Arch Dermatol Res* 299, 59-69.
3. Prazma, C.M. and Tedder, T.F. (2008) *Immunol Lett* 115, 1-8.
4. Prazma, C.M. et al. (2007) *J Immunol* 179, 4550-62.
5. Lüthje, K. et al. (2008) *Int Immunol* 20, 949-60.
6. Fujimoto, Y. et al. (2002) *Cell* 108, 755-67.
7. Breloer, M. and Fleischer, B. (2008) *Trends Immunol* 29, 186-94.
8. Hock, B.D. et al. (2001) *Int Immunol* 13, 959-67.
9. Lin, W. et al. (2017) *Sci Rep* 7, 12895.
10. Horvatinovich, J.M. et al. (2017) *J Immunol* 198, 2286-2301.

**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**

**W:** Western Blotting **IP:** Immunoprecipitation

**Cross-Reactivity Key**

**H:** Human

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