

Technical Data Sheet

Biotin Rat Anti-Mouse Crry/p65

Product Information

Material Number:	550059
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	1F2
Immunogen:	Recombinant soluble Crry/p65 protein
Isotype:	Rat (SD) IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.

Description

The 1F2 mAb reacts with Crry/p65, a cell-surface protein that blocks complement activation and C3 deposition by both the classical and alternative pathways. Based on nucleotide sequence identity, Crry/p65 is the genetic homologue of human CR1 (Complement Receptor 1). However, it has been proposed that Crry/p65 is the functional homologue of human MCP (Membrane Cofactor Protein) and/or DAF (Decay-Accelerating Factor), due to the similar functions these proteins share and the fact that Crry/p65 does not display CR1's complement-receptor activity. Crry/p65 is expressed in most organs, such as thymus, kidney, uterus, skin, lung, pancreas, heart, stomach, large and small intestine, and spleen. Platelets, brain, and muscle express low, but detectable levels of Crry/p65. In addition, Crry/p65 is expressed in J774 cells, bone marrow-derived macrophages, and thioglycollate-elicited peritoneal macrophages, as determined by RT-PCR. Crry is crucial in the regulation of complement activation during early mouse embryonic development and essential in fetomaternal tolerance. The 1F2 mAb partially blocks Crry/p65-mediated complement protection *in vitro*.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.

Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
553928	Biotin Rat IgG2a κ Isotype Control	0.25 mg	R35-95
554060	FITC Streptavidin	0.5 mg	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

Foley S, Li B, Dehoff M, Molina H, Holers VM. Mouse Crry/p65 is a regulator of the alternative pathway of complement activation. *Eur J Immunol.* 1993; 23(6):1381-1384.(Biology)
 Holers VM, Kinoshita T, Molina H. The evolution of mouse and human complement C3-binding proteins: divergence of form but conservation of function. *Immunol Today.* 1992; 13(6):231-236.(Biology)
 Kurtz CB, O'Toole E, Christensen SM, Weis JH. The murine complement receptor gene family. IV. Alternative splicing of Cr2 gene transcripts predicts two distinct gene products that share homologous domains with both human CR2 and CR1. *J Immunol.* 1990; 144(9):3581-3591.(Biology)
 Li B, Sallee C, Dehoff M, Foley S, Molina H, Holers VM. Mouse Crry/p65. Characterization of monoclonal antibodies and the tissue distribution of a functional homologue of human MCP and DAF. *J Immunol.* 1993; 151(8):4295-4305.(Immunogen)

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Martin BK, Weis JH. Murine macrophages lack expression of the Cr2-145 (CR2) and Cr2-190 (CR1) gene products. *Eur J Immunol.* 1993; 23(11):3037-3042. (Biology)

Molina H, Wong W, Kinoshita T, Brenner C, Foley S, Holers VM. Distinct receptor and regulatory properties of recombinant mouse complement receptor 1 (CR1) and Crry, the two genetic homologues of human CR1. *J Immunol.* 1993; 175(1):121-129.(Biology)

Xu C, Mao D, Holers VM, Palanca B, Cheng AM, Molina H. A critical role for murine complement regulator crry in fetomaternal tolerance. *Science.* 2000; 287(5452):498-501.(Biology)