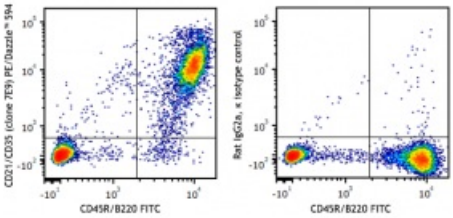
SONY

Product Data Sheet

PE/Dazzle™ 594 anti-mouse CD21/CD35 (CR2/CR1)

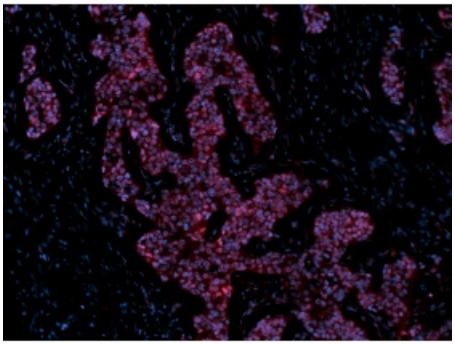
Catalog # / Size:	1217200 / 100 µg 1217195 / 25 µg
Clone:	7E9
Isotype:	Rat IgG2a, κ
Immunogen:	CD35/CFA
Reactivity:	Mouse
Preparation:	The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Workshop Number:	V-CD28.05
Concentration:	0.2 mg/mL



C57BL/6 splenocytes were stained with CD45R/B220 FITC and CD21/CD35 (CR2/CR1) (clone 7E9) PE/Dazzle™ 594 (left) or rat IgG2a, κ isotype control PE/Dazzle™ 594 (right).

Applications:

Applications:	Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application. * PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.
Application Notes:	The MEC14.7 antibody does not stain bone marrow cells like some other mouse CD34 antibodies, probably because the antibody recognizes a different epitope from other mAbs. Additional reported applications (for the relevant formats) include: immunoprecipitation, Western blotting[6], and immunohistochemistry of acetone-fixed frozen sections and paraffin-embedded sections[2,4,5,6].



Formalin-fixed paraffin-embedded human breast cancer tissue slices were deparaffinized and rehydrated. Antigen retrieval was done with Tris-Buffered Saline 1X (1.0 M, pH 7.4) at 95°C for 40 minutes, washed with PBS/0.05% Tween 20 twice for five minutes, permeabilized with 0.5% Triton X-100 for ten minutes, and blocked with 5% FBS and 0.2% gelatin for 30 minutes. Then, the slices were stained with 5 µg/mL anti-EGFR (clone A19002A) Alexa Fluor® 647 (red) at 4°C overnight. Nuclei were counterstained with DAPI (green). The image was captured with a 10X objective.

Application References:

1. Boackle S, *et al.* 2001 *Immunity* 15:775.
2. de Andres B, *et al.* 2012. *J. Immunol.* 189:2300. PubMed
3. Chiu YK, *et al.* 2014. *J Immunol.* 193:2207. PubMed
4. Koening PA, *et al.* 2014. *J Biol Chem.* 289:34490. PubMed

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Description: CD21, also known as CR2 (complement receptor 2) and C3d receptor, binds C3d and iC3b. It is also a receptor of Epstein-Barr virus. CD35, also known as CR1, binds C3b, iC3b, C4b, and iC4b. CD21/CD35 is primarily expressed on B lymphocytes, mast cells, follicular dendritic cells, macrophages, and activated granulocytes. CD21/CD35 forms part of the B-cell antigen receptor complex with CD19 and CD81 and is involved in signal transduction.

Antigen References:

1. Kozono Y, *et al.* 1998. *J. Immunol.* 160:1562.
2. Shimizu I, *et al.* 2007. *Blood* 109:1773.
3. Roozendaal R and MC. Carroll. 2007. *Immunol. Rev.* 219:157.