## **Product Data Sheet**

## PE/Dazzle<sup>™</sup> 594 anti-mouse CD205 (DEC-205)

Catalog # / Size:	1291085 / 25 μg 1291090 / 100 μg
Clone:	NLDC-145
Isotype:	Rat IgG2a, к
<b>Reactivity:</b>	Mouse
<b>Concentration:</b>	0.2

## **Applications:**

**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  $\leq 0.03$  microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* PE/Dazzle<sup>™</sup> 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

Application<br/>Notes:Additional reported applications (for relevant formats) include:<br/>immunohistochemical staining of acetone-fixed frozen sections1, Western Blot1-3,<br/>and immunoprecipitation of bone marrow dendritic cell extracts2.

**Description:** CD205, also known as DEC-205, is a 205 kD integral membrane protein homologous to the macrophage mannose receptor. It is a type I cell surface protein that belong to the C-type lectin family. CD205 is expressed at high levels by dendritic cells and thymic epithelial cells. It is also expressed by a number of other cell types, such as B lymphocytes, macrophages, Langerhans cells, bone marrow stromal cells, granulocytes, epithelial cells of pulmonary airways, and the capillaries of the brain. CD205 is a endocytic receptor used by dendritic cells and thymic epithelial cells to direct captured antigens from the extracellular space to specialized antigen processing. It mediates antigen uptake and presentation and cross-presentation to T cells. It has been reported that CD205 acts as a recognition receptor for dying cells, potentially provides an important pathway for the uptake of self-antigen in the intrathymic environment, and is involved in peripheral tolerance. Antibody-mediated antigen-targeting via the DEC-205 receptor increases the efficiency of vaccination for T cell immunity.