DiagNano™ CD45 Magnetic Quantum Dots, 655 nm Emission Peak

Cat.No: DNQ-CQ014

DESCRIPTION

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DiagNano™ CD45 Magnetic Quantum Dot Beads, 655 nm Emission Peak is a dual-purpose reagent, which combines quantum dots and superparamagnetic iron oxide particles within the same nanoparticle. Cells labeled with this product targeting specific antigens will be both fluorescent and magnetic. Therefore, after labeling cells of interest, one can look at the feed to determine the percent positive fluorescently via flow cytometry, and then place the labeled cells in a magnetic separator and analyze both the magnetic (for the enrichment) and the nonmagnetic (for the depletion) of targeted cells without the need for further fluorescent labeling. The HI30 antibody reacts with all isoforms of CD45, a type I transmembrane glycoprotein expressed on the surface of most hematopoietic cells except mature erythrocytes, platelets, and plasma cells; expression of CD45 is lost during differentiation of these cell types. CD45 is a member of the protein tyrosine phosphatase family and functions in a number of immunoregulatory processes, including cell activation, growth, differentiation, and oncogenic transformation. The leukocyte common antigen (LCA), the region recognized by the HI30 antibody, is an extracellular region located proximal to the membrane and common to all isoforms of CD45.

APPLICATION

Application Notes	Flow Cytometry, Magnetic Separation

PRODUCT INFORMATION

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@cd-bioparticles.com
Tel: 1-631-633-6938 Fax: 1-631-938-8221

Ligand	CD45 Antibody
Emission Max	655 nm
Usage Statement	Suggested working dilution 15-20 µL/million cells
Reactivity	Human
Host/Isotype	Mouse/IgG1
Antibody	0.08 mg/mL, Monoclonal, Clone: HI30
Immunogen	Human CD45
Appearance	Liquid

STORAGE AND SHIPPING

Storage Buffer	Borate, pH 7.4 with 0.5% BSA, 0.1% sodium azide
Storage	4°C do not freeze

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