

PE/iFluor™ 594 Anti-human CD33 Antibody
HI33aCatalog number: 103301Y0, 103301Y1, 103301Y2
Unit size: 25 tests, 100 tests, 500 tests**Product Details**

Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	0.1 mg/mL
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 0.09% sodium azide, 0.2% (w/v) BSA

Antibody Properties

Species Reactivity	Human
Class	Primary
Clonality	Monoclonal
Host	Mouse
Isotype	Mouse IgG2a
Immunogen	CD33 (Siglec-3, gp67)
Clone	HI33a
Conjugate	PE/iFluor™ 594

Biological Properties

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/iFluor™ 594 under optimal conditions
Application	Flow Cytometry (FACS)

Spectral Properties

Conjugate	PE/iFluor™ 594
Excitation Wavelength	566 nm
Emission Wavelength	606 nm

Applications

The HI33a monoclonal antibody recognizes human CD33, a 67 kD single-pass type I membrane protein frequently expressed on the surface of monocytes, neutrophils, dendritic cells and mast cells. In some organisms, CD33 plays a role in the downregulation of calcium ion transport, is a suppressor of tumor necrosis factor production and is an inhibitor of interleukin-1 beta production. Additionally, it has been closely linked to vital biological processes such as signal transduction, especially immune response-inhibiting signal transduction. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands such as α -2 and 6- linked Sialic acid. CD33 is a fairly

uncommon antibody target, with a little more than 8000 publications in the last decade. Even still, CD33 is typically used in flow cytometry applications as a phenotypic marker for differentiation of cell types, specifically in the study of neuroscience. This antibody was purified through affinity chromatography and conjugated to PE/iFluor™ 594 (ex/em = 566/606 nm). It is compatible with the 561 nm laser and 610/20 nm bandpass filter (for example, as in the BD FACSARIA™ III).