

**PE/iFluor™ 700 Anti-human CD33 Antibody**  
**\*HI33a\***Catalog number: 103301X0, 103301X1, 103301X2  
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™ 700

**Biological Properties**

Preparation	Antibody purified by affinity chromatography and then conjugated with PE/iFluor™ 700 under optimal conditions
Application	Flow Cytometry (FACS)

**Spectral Properties**

Conjugate	PE/iFluor™ 700
Excitation Wavelength	566 nm
Emission Wavelength	708 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  $\alpha$ -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™ 700 (ex/em = 566/708 nm). It is compatible with the 561 nm laser and 695/40 nm bandpass filter (for example, as in the Agilent Technologies NovoCyte Quanteon).