

**iFluor™ 405 Anti-human CD33 Antibody**  
**\*HIM3-4\***Catalog number: 10331020, 10331021  
Unit size: 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 IgG1
Immunogen	CD33 (Siglec-3, gp67)
Clone	HIM3-4
Conjugate	iFluor™ 405

**Biological Properties**

Appearance	Light yellow liquid
Preparation	Antibody purified by affinity chromatography and then conjugated with iFluor™ 405 under optimal conditions
Application	Flow Cytometry (FACS), Fluorescence Imaging

**Spectral Properties**

Conjugate	iFluor™ 405
Excitation Wavelength	403 nm
Emission Wavelength	427 nm

**Applications**

HIM3-4 is an anti-human monoclonal antibody that forms an immune complex with the CD33 antigen. CD33 (sometimes referred to as p67) is a 67 kD transmembrane glycoprotein that is located on the surface of cells such as macrophages and granulocytes. CD33 has been thought to be involved with important biological processes like signal transduction, specifically immune response-inhibiting signal transduction. Also, in

certain organisms, it is a promoter of protein secretion, is an enhancer of protein tyrosine phosphatase activity and is a repressor of interleukin-8 production. From a research standpoint, it is of biological interest due to its association with important macromolecules/ligands like  $\alpha$ -2, Sugar chains containing sialic acid 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 essential for immunology, neuroinflammation and cell biology research, commonly serving as a phenotypic marker for differentiating cell types in flow cytometric applications. This antibody was purified through affinity chromatography and conjugated to iFluor™ 405 (ex/em = 403/427 nm). It is compatible with the 405 nm laser and 456/51 nm bandpass filter (for example, as in the Luminex Amnis CellStream).