

**iFluor™ 405 Anti-human CD53 Antibody**  
**\*HI36\***Catalog number: 10531020, 10531021  
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 IgG3                   |
| Immunogen          | CD53 (Tetraspanin-25, MOX44) |
| Clone              | HI36                         |
| 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**

The HI36 monoclonal antibody binds to human CD53, a 35 - 42 kD member of the tetraspanin/transmembrane-4 superfamily typically expressed on the surface of leukocytes, B cells, dendritic cells, osteoblasts and thymocytes. In many organisms, CD53 plays a role in the upregulation of myoblast fusion, and is associated with a variety of biologically interesting macromolecules/ligands, for instance, VLA-4 and HLA-DR. CD53 is a

relatively rare antibody target, with fewer than 600 publications in the last decade. Even still, CD53 is vital to costimulatory molecules 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 450/50 nm bandpass filter (for example, as in the BD FACSCanto™ II).