

## Technical Data Sheet

### APC/Cyanine7 Anti-Human CD29

**Catalog Number:** 107215, 107216

**Size:** 25 tests, 100 tests

**Target Name:** CD29, Integrin  $\beta$ 1 chain, VLA- $\beta$  chain, gpIIa, ITGB1

**Regulatory Status:** RUO

#### Product Details

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**Clone:** K20

**Application:** FC

**Reactivity:** Human

**Format:** APC/Cyanine7

**Isotype:** Mouse IgG2a

**Antibody Type:** Monoclonal

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA

**Protein Concentration:** Supplied at a lot-specific concentration.

**Storage&Handling:** The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.

**Recommended Usage:** For flow cytometric staining, it is recommended to use 5  $\mu$ L of this reagent per 0.5-1.0 million cells in a 100  $\mu$ L volume. Optimal reagent performance should be determined by titration for each specific application.

**Excitation Laser:** Red Laser (633 nm)

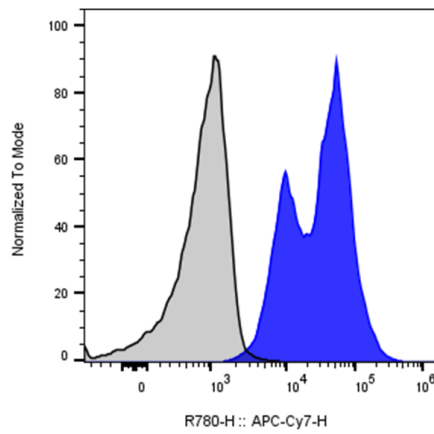
#### Background Information

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Integrin beta-1 (ITGB1), also known as CD29, is a cell surface receptor that in humans is encoded by the ITGB1 gene.[5] This integrin associates with integrin alpha 1 and integrin alpha 2 to form integrin complexes which function as collagen receptors. Integrin beta 1 is expressed as at least four different isoforms. In cardiac muscle and skeletal muscle, the integrin beta-1D isoform is specifically expressed, and localizes to costameres, where it aids in the lateral force transmission from the Z-discs to the extracellular matrix. Abnormal levels of integrin beta-1D have been found in limb girdle muscular dystrophy and polyneuropathy.

#### Product Data

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Human peripheral blood lymphocytes stained with either APC/Cy7 Anti-Human CD29 Clone K20 (color-filled histogram) or an isotype control (gray histogram).