

**Alexa Fluor® 700 anti-human CD34**

**Catalog # / Size:** 2318110 / 100 tests  
2318105 / 25 tests

**Clone:** 561

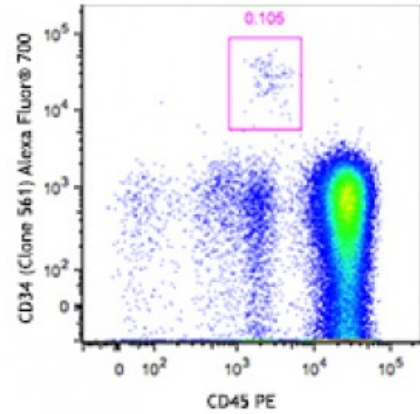
**Isotype:** Mouse IgG2a, κ

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 700 under optimal conditions.

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

**Concentration:** Lot-specific

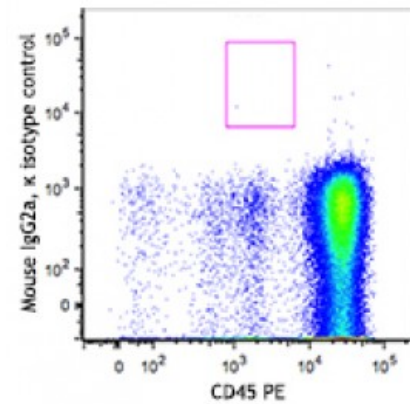


Human peripheral blood mononuclear cells were stained with CD45 PE and CD34 (clone 561) Alexa Fluor® 700 (top) or mouse IgG2a, κ Alexa Fluor® 700 isotype control (bottom). Data shown was gated on CD14<sup>-</sup> cell population.

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



\* Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

**Application Notes:** The 561 antibody recognizes a class III group epitope, which is resistant to sialidase/glycolyprotease and chymopapain treatment.

**Application References:** 1. Croockewit AJ, *et al.* 1998. *Scand. J. Immunol.* 47:82.  
2. Rosenzweig M, *et al.* 2001. *J. Med. Primatol.* 30:36.

**Description:** CD34, also known as gp105-120, is a type I monomeric sialomucin-like glyco-phosphoprotein with an approximate molecular weight of 105-120 kD. It is

selectively expressed on the majority of hematopoietic stem/progenitor cells, bone marrow stromal cells, capillary endothelial cells, embryonic fibroblasts, and some nervous tissue. CD34 is a commonly used marker for identifying human hematopoietic stem/progenitor cells. Based on different sensitivities, four groups of epitopes of CD34 have been described. CD34 mediates cell adhesion and lymphocytes homing through binding to L-selectin and E-selectin ligands.