

PE anti-human CD207 (Langerin)

Catalog # / Size: 2361020 / 100 tests
2361015 / 25 tests

Clone: 10E2

Isotype: Mouse IgG1, κ

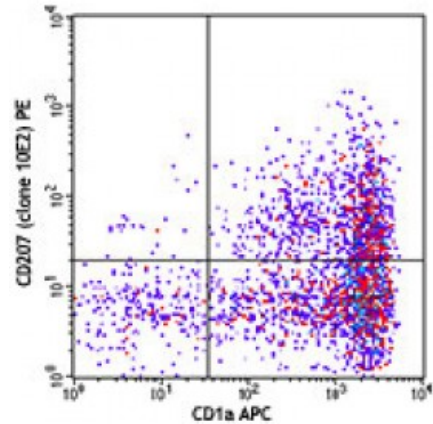
Immunogen: Primary human Langerhans cells

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

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

Concentration: Lot-specific



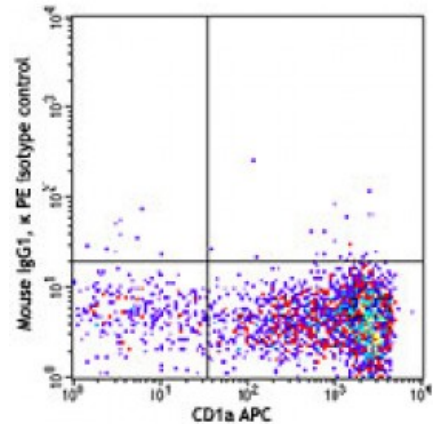
Monocyte-derived Langerhans cells were stimulated with recombinant human GM-CSF, TGF-β and IL-4 for 3 days, followed by an additional 3-day culture with rhGM-CSF and TGF-β. They were then stained with CD1a APC and CD207 (clone 10E2) PE (top) or

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported application (for the relevant formats) includes: blocking the binding of HIV-1 to Langerhans cells¹.



Application References: 1. Witte LD, *et al.* 2007. *Nat. Med.* 13:367. (Block)

Description: CD207, also known as Langerin, is a 40 kD type II transmembrane cell glycoprotein which belongs to C-type lectin with mannose binding specificity. It is predominantly expressed on Langerhans cells and induces the formation of Birbeck granules, the Langerhans cell hallmark organelle. It is also found on several other subtypes of dendritic cells, such as dermal CD103-positive dendritic cells and splenic CD8-positive dendritic cells. Langerin is generally thought to be involved in antigen processing. Recently, it has been found that HIV captured by Langerin was internalized into Birbeck granule and degraded, which results in

inhibition of HIV-1 infection and subsequent transmission.

**Antigen
References:**

1. Valladeau J, *et al.* 2000. *Immunity* 12:71.
2. Mc Dermott R, *et al.* 2002. *Mol. Biol. Cell.* 13:317.
3. Mizumoto N, *et al.* 2004. *J. Clin. Invest.* 113:701.
4. Witte LD, *et al.*