Product Data Sheet

Purified anti-human CD207 (Langerin)

Catalog # / 2361010 / 100 µg

Size:

Clone: 10E2

Isotype: Mouse IgG1, ĸ

Immunogen: Primary human Langerhans cells

Reactivity: Human

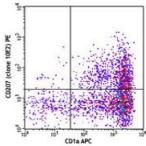
The antibody was purified by affinity **Preparation:**

chromatography.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.5



Monocyte-derived Langerhans cells were stimulated with recombinant human GM-CSF, TGFβ 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. For flow cytometric staining, the suggested use of this reagent is ≤1.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal

performance for each application.

Additional reported application (for the **Application** Notes: 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)

CD207, also known as Langerin, is a 40 kD type II transmemberane cell **Description:**

> 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.