

**Mouse Anti-Langerin/CD207 [12D6]: MC0544, MC0544RTU7**

**Intended Use:** For Research Use Only

**Description:** Langerhans cells (LCs) are a subset of immature dendritic cells (DCs) that specifically localize in the epidermis and other mucosal epithelia. Epidermal LCs possess strong immunostimulatory capacity and play a central role in the initiation and regulation of immune responses. Langerin (CD207) is a Ca<sup>2+</sup>-dependent, C-type lectin domain-containing, type II transmembrane protein that induces epidermal LCs to differentiate into Birbeck granules (BG). BGs are organelles with superimposing and zipper membranes that influence proper class I type antigen presentation to the circulating T-cells. Human spleen, lymph node, thymus, liver, lung and heart express langerin protein. Langerin protein expression has utility in differentiating Langerhans cell histiocytosis from other non-Langerhans cell histiocytic proliferations.

**Specifications**

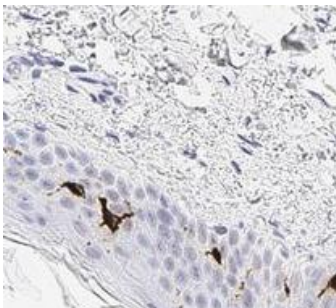
Clone: 12D6  
 Source: Mouse  
 Isotype: IgG2b/k  
 Reactivity: Human  
 Localization: Nucleus  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC  
 Package:

Description	Catalog No.	Size
Langerin/CD207 Concentrated	MC0544	1 ml
Langerin/CD207 Prediluted	MC0544RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Transitional cell cancer, basal cell cancer  
 Concentrated Dilution: 25-100  
 Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human skin stained with anti-Langerin using DAB

**References:**

1. Dual Specificity of Langerin to Sulfated and Mannosylated Glycans via a Single C-type Carbohydrate Recognition Domain. Hiroaki Tateno, et al. JBC Papers in Press, December 21, 2009,
2. Activin A Induces Langerhans Cell Differentiation In Vitro and in Human Skin Explants. Tiziana Musso, et al. September 24, 2008.
3. Langerin (CD207) staining in normal pediatric tissues, reactive lymph nodes, and childhood histiocytic disorders. Kudakwashe ChikwavaRonald Jaffe, Pediatric And Developmental Pathology. December Volume 7, Issue 6, pp 607–614, 2004.

Doc. 100-MC0544  
Rev. A