

Code No. 10101

**Anti-Human  
Lag (Langerhans Cells), (4D12) Mouse IgG MoAb**Volume : 200 µg

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**Introduction** : Langerhans cells (LC) were reported to function as the antigen-presenting cells in the skin. They express immune response gene-associated antigens on their cell membranes. These cells seem to mediate contact sensitivity in vivo and the antigen-specific response of T lymphocytes in vitro. Langerhans cells also have surface receptors for the Fc portion of immunoglobulin G (IgG) and for the third component of complement, C3. They originate from the bone marrow, but details about the precursors of LC are not known. This antibody reacts specifically to human LC. The protein recognized by this antibody was mainly in the membranes of Birbeck granules and related structures.

**Antigen** : Human Langerhans cells

**Source** : Mouse-Mouse hybridoma  
(X63 - Ag 8.653 × BALB/c mouse spleen cells)

**Clone** : 4D12                      **Subclass** : IgG<sub>1</sub>

**Purification** : Affinity purified with Protein A

**Form** : Lyophilized product in PBS containing 1 % BSA and 0.05 % NaN<sub>3</sub>

**How to use** : 1.0 mL deionized water will be added to the product, then its concentration comes to 200 µg/mL

**Stability** : Lyophilized product, 5 years at 2 - 8 °C  
: Solution, 2 years at -20 °C

**Application** : This antibody can be used for immunohistochemistry with frozen sections. The optimal concentration is 1 - 5 µg/mL, however, the concentration should be optimized by each laboratory.

**Specificity** : Reacts with membrane protein of Birbeck granules

**Reference** : 1. Kashihara, M. *et al.* A monoclonal antibody specifically reactive to human Langerhans cells. *The Journal of Investigative Dermatology*. 1986: 87 (5), 602-607.  
2. Kashihara-Sawami M. *et al.* Letterer-Siwe disease: immunopathologic study with a new monoclonal antibody. *Journal of The American Academy of Dermatology*. 1988: 18 (4Pt1), 646-654.

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*For research use only, not for use in diagnostic procedures.*