

## Product datasheet for **AM33011PU-N**

### CD11a (ITGAL) (Inhibitor) Mouse Monoclonal Antibody [Clone ID: NKI(SPV)-L15]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	NKI(SPV)-L15
Applications:	FC, IP, WB
Recommended Dilution:	<b>Immunoblotting.</b> <b>Flow Cytometry.</b> <b>Immunoprecipitation.</b>
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Immunization of BALB/c mice with cells of the T4T8- cytotoxic T lymphocyte clone HG-38; the antibodies were selected for inhibition of T cell mediated killing by screening of the hybridoma supernatants 10-14 days after the fusion.
Specificity:	The monoclonal antibody NKI(SPV)-L15 reacts with the alpha chain of LFA-1, the CD11a/CD18 integrin heterodimer present on Human T- and B-lymphocytes, granulocytes and monocytes. The antibody was selected for inhibition of T-cell mediated killing.
Formulation:	PBS State: Purified State: Liquid purified IgG fraction Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freeze-thaw cycles.
Stability:	Shelf life: One year from despatch.
Gene Name:	integrin subunit alpha L
Database Link:	<a href="#">Entrez Gene 3683 Human P20701</a>



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**Background:**

Integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; alpha polypeptide), also known as ITGAL, is a human gene which functions in the immune system. It is involved in cellular adhesion and costimulatory signaling.

ITGAL encodes the integrin alpha L chain. Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. This I-domain containing alpha integrin combines with the beta 2 chain (ITGB2) to form the integrin lymphocyte function-associated antigen-1 (LFA-1), which is expressed on all leukocytes.

LFA-1 is part of the family of leukocyte integrins that are recognised by their common  $\beta$ -chains (CD18). LFA-1 also has a distinct  $\alpha$ -chain (CD11a).

LFA-1 is expressed on lymphocytes, monocytes and granulocytes; it has been shown that LFA-1 contributes to the adhesion reaction of these cells. Blocking experiments with anti-LFA-1 monoclonal antibodies demonstrated that LFA-1 inhibits the adhesion step effector and target cells in cytotoxic T lymphocyte, natural killer and lectin dependent cytotoxicity.

LFA-1 is involved in recruitment to the site of infection. It binds to ICAM-1 on antigen-presenting cells and functions as an adhesion molecule. LFA-1 is the first to bind T-cells to antigen-presenting cells and initially binds weakly. A signal from the T-cell receptor and/or the cytokine receptor changes the conformation and prolongs the cell contact, allowing the T-cell to proliferate.

**Synonyms:**

Integrin alpha-L, LFA1, LFA-1