



# Mouse Anti-Human CD11a (LFA-1 $\alpha$ ) Monoclonal antibody, clone R7-1 (CABT-L4465)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

### Product Overview

The R7-1 monoclonal antibody reacts with human LFA-1 $\alpha$  (lymphocyte function-associated antigen 1 alpha) also known as integrin alpha L chain and CD11a. Specifically, this antibody recognizes an epitope within the I-domain of LFA-1 $\alpha$ . LFA-1 $\alpha$  and CD18 combine to form LFA-1, a 180 kDa glycoprotein and a member of the integrin family. LFA-1 is expressed on the surface of all leukocytes including lymphocytes, monocytes, macrophages, and granulocytes. LFA-1 plays a central role in leukocyte intercellular adhesion through interactions with its ligands, ICAM-1 (CD54), ICAM-2 (CD102), and ICAM-3 (CD50), and also functions in lymphocyte costimulatory signaling. The R7-1 antibody is a neutralizing antibody.

<b>Target</b>	Human CD11a (LFA-1 $\alpha$ )
<b>Immunogen</b>	C57BL/6 mouse splenocytes
<b>Isotype</b>	IgG1
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	R7-1
<b>Purification</b>	Protein G purified. Purity>95%. Determined by SDS-PAGE
<b>Conjugate</b>	Functional Grade
<b>Applications</b>	FuncS, FC
<b>Molecular Weight</b>	150 kDa
<b>Format</b>	0.2 $\mu$ M filtered liquid. Purified from tissue culture supernatant in an animal free facility

<b>Concentration</b>	Lot specific
<b>Size</b>	5 mg
<b>Buffer</b>	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free]  Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
<b>Preservative</b>	None
<b>Storage</b>	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
<b>Ship</b>	Wet ice

## BACKGROUND

<b>Introduction</b>	CD11 is the alpha (alpha) component of various integrins, especially ones in which the beta (beta) component is CD18 (beta2) and mediate leukocyte adhesion. For example, LFA1 (CD11a/CD18) short representation of Lymphocyte Function-associated Antigen 1, also called alphaLbeta2 integrin; Mac1 (CD11b/CD18) present on macrophages that is also called Macrophage-1 antigen (CR3) and alphambeta2 integrin; CD11c/CD18 also called complement receptor 4 (CR4)
<b>Keywords</b>	CD11;LFA 1 alpha;LCAMB;ITGB 2

## GENE INFORMATION

<b>Official Symbol</b>	CD11
<b>Synonyms</b>	CD11; LFA 1 alpha; LCAMB; ITGB 2
<b>References</b>	Welzenbach, K., et al. (2015). "A novel multi-parameter assay to dissect the pharmacological effects of different modes of integrin alphaLbeta2 inhibition in whole blood." Br J Pharmacol 172(20): 4875-4887. PubMed;