

## Human/Mouse/Rat/Canine ALCAM/CD166 Alexa Fluor® 647-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF1172R 100 µg

DESCRIPTION		
Species Reactivity	Human/Mouse/Rat/Canine	
Specificity	Detects human, mouse and rat ALCAM/CD166 in Western blots. In direct ELISAs, less than 10% cross-reactivity with rhBCAM, recombin mouse (rm) OCAM, and rmMAdCAM-1 is observed. Detects canine ALCAM/CD166 in flow cytometry.	
Source	Polyclonal Goat IgG	
Purification	Antigen Affinity-purified	
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse ALCAM/CD166 Trp28-Lys527 Accession # AAC06342	
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm	
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide	
	*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Shee (SDS) for additional information and handling instructions.	

APPLICATIONS			
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.			
CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.		
Western Blot	Optimal dilution of this antibody should be experimentally determined.		
Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.		
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.		
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.		

PREPARATION AND STORAGE		
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.	
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied	

## **BACKGROUND**

ALCAM, activated leukocyte cell adhesion molecule, is a type I membrane glycoprotein and a member of the immunoglobulin supergene family. It is also known as CD166, MEMD, SC-1/DM-GRASP/BEN in the chicken, and KG-CAM in the rat. ALCAM is expressed on thymic epithelial cells, activated B and T cells, and monocytes. ALCAM can bind itself homotypically and is also capable of binding CD6, NgCAM, and other, as of yet, unidentified brain proteins. ALCAM/CD6 interaction may be involved in T cell development and T cell regulation. Additionally, ALCAM/CD6 and ALCAM/NgCAM interactions may play roles in the nervous system. ALCAM has also been observed to be upregulated on highly metastasizing melanoma cell lines and may play a role in tumor migration. ALCAM is a 583 amino acid (aa) protein consisting of a 27 aa signal peptide, a 500 aa extracellular domain, a 24 aa transmembrane domain, and a 32 aa cytoplasmic domain. The extracellular domain of ALCAM contains 5 Ig-like domains of which the amino-terminal V1 domain is essential for ligand binding and ALCAM-mediated cell aggregation (1-4). The ECD of mouse ALCAM shares 97.5% and 93.2% aa sequence identity with rat and canine ALCAM ECD, respectively.

## PRODUCT SPECIFIC NOTICES

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