RD SYSTEMS a biotechne brand

Human ADAM28 Alexa Fluor® 647-conjugated Antibody

Monoclonal Mouse IgG₁ Clone # 1004266 Catalog Number: FAB93252R

100 µg

DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human ADAM28 in direct ELISAs.		
Source	Monoclonal Mouse IgG ₁ Clone # 1004266		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	Chinese Hamster Ovary cell line, CHO-derived human ADAM28 Leu72 & Leu191-Ala623, Accession # Q0UKQ2		
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm		
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide.		

*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (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.			
	Recommended Concentration	Sample	
Flow Cytometry	0.25-1 μg/10 ⁶ cells	Human PBMC	

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

A distintegrin and metalloprotease domain-containing protein 28 (ADAM28), also known as MDC-L, is a member of the M12B peptidase family of enzymes. It is synthesized as an approximately 80-90 kDa glycosylated proprotein that is processed to a mature form later in the secretory pathway (1-3). After the removal of the propeptide that contains a cysteine switch motif, the activated form of ADAM28 consists of a 467 aa extracellular domain (ECD) which contains a peptidase, disintegrin, cysteine-rich and EGF-like domains, followed by a 21 aa transmembrane segment and an 89 aa cytoplasmic domain (3). Alternative splicing generates additional isoforms with a variety of substitutions and deletions in the cysteine-rich and EGF-like domains (1). Within the ECD, human ADAM28 shares 73% aa sequence identity with mouse and rat ADAM28 (3). ADAM28 is a cell surface protein that is involved in a variety of cell-cell and cell-matrix interactions, including fertilization, muscle development, and neurogenesis (4-6), and exhibits catalytic activity to insulin-like growth factor binding protein-3 (7). Like many members of the ADAM28 interacts with integrin to influence cell adhesion and cell-cell interaction (8). ADAM28 can mediate the adhesion of the Jurkat cells, T-lymphoma cell line, through integrin $\alpha 4\beta 1(9)$. R&D Systems in-house testing also indicates that ADAM28 cleaves IGFBP-3.

References:

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