

### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human ADAM28 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 1004266
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Chinese Hamster Ovary cell line, CHO-derived human ADAM28 Leu72 & Leu191-Ala623, Accession # Q0UKQ2
<b>Conjugate</b>	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
<b>Formulation</b>	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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	Human PBMC

### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

### BACKGROUND

A disintegrin 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 ADAM proteins, the disintegrin domain of 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 α4β1(9). R&D Systems in-house testing also indicates that ADAM28 cleaves IGFBP-3.

#### References:

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8. Edwards, L. *et al.* (2008) Molecular Aspects of Medicine **29**:258.
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