



MONOCLONAL ANTIBODY

For research use only, Not for diagnostic use.

Catalog No. SHI-EXO-M01

# Anti CD9 [ Clone : 12A12]

## BACKGROUND

CD9 is a cell surface glycoprotein which belongs to the tetraspanin superfamily. CD9 is known to complex with integrins and other transmembrane 4 superfamily proteins. It is found on the surface of exosomes. It can modulate cell adhesion and migration and also trigger platelet activation and aggregation.

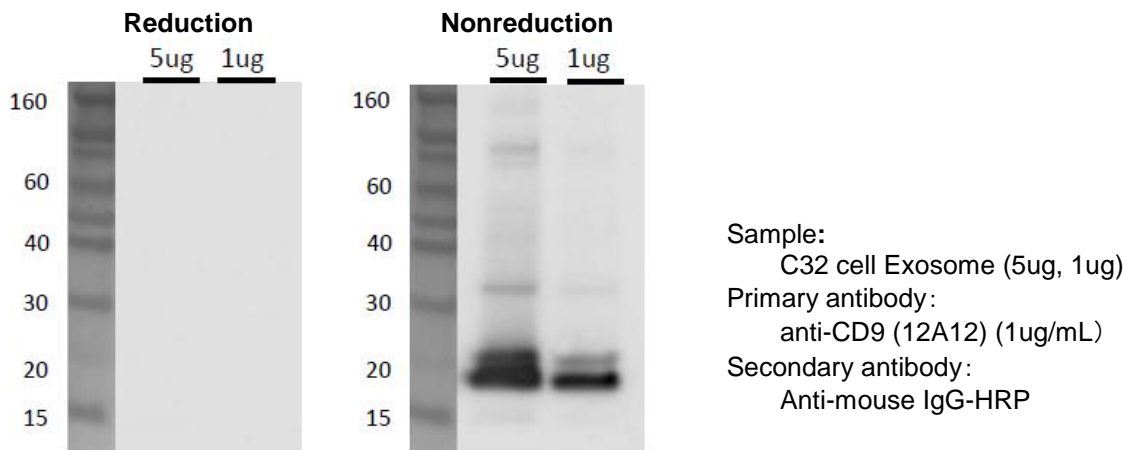
<b>Product type</b>	Primary antibody
<b>Immunogen</b>	Human CD9 (a.a. 113-195)
<b>Raised in</b>	Mouse
<b>Myeloma</b>	-
<b>Clone number</b>	12A12
<b>Isotype</b>	IgG2b
<b>Source</b>	Culture supernatant
<b>Purification</b>	Affinity purified by Protein G
<b>Buffer</b>	Phosphate buffered saline containing 0.1% NaN <sub>3</sub> as a preservative
<b>Concentration</b>	1 mg / mL
<b>Volume</b>	100 uL
<b>Label</b>	Unlabeled
<b>Specificity</b>	Human CD9
<b>Cross reactivity</b>	Human. Other species is not tested.
<b>Storage</b>	Store below - 40°C Aliquot to avoid cycles of freeze/thaw.

- |                              |                                                                                                   |
|------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Application notes</b>     | • <b>Western blotting:</b> 1/500 - 1/2,000 (0.5 - 2ug/mL, non-reductive condition)                |
| <b>Recommended dilutions</b> | • <b>Immunoprecipitation:</b> 1/200 – 1/1,000 (1- 5ug/mL)<br>* Experiment example : Serum Exosome |
|                              | • <b>ELISA:</b> 1/10,000 – 1/200,000 (5 ng/mL - 0.1ug/mL)                                         |
|                              | • <b>Flow cytometry</b>                                                                           |

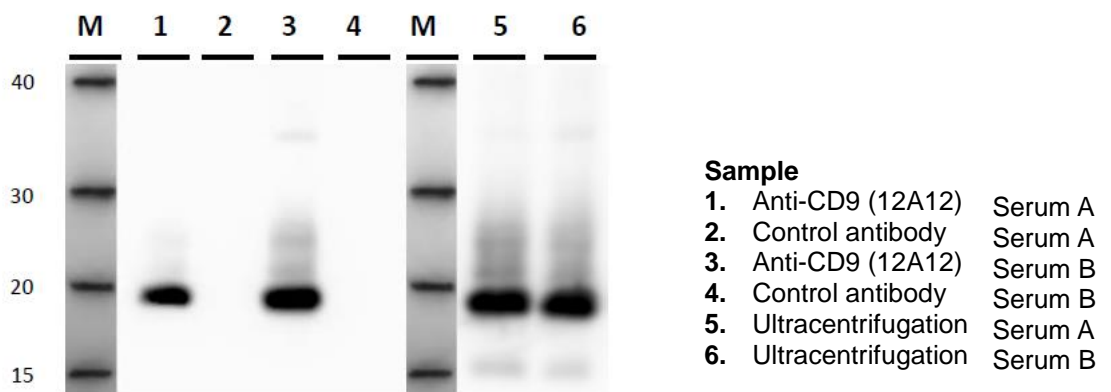
Other applications have not been tested.  
Optimal dilutions/concentrations should be determined by the end user.

- |                   |                                                                                                                  |
|-------------------|------------------------------------------------------------------------------------------------------------------|
| <b>References</b> | • Tsuda S <i>et al.</i> , <i>Sci Rep.</i> 2017 Oct 11;7(1):12989. PMID: <a href="#">29021582</a>                 |
|                   | • Nishida-Aoki N <i>et al.</i> , <i>Mol Ther.</i> 2017 Jan 4;25(1):181-191. PMID: <a href="#">28129113</a>       |
|                   | • Matsuzaki K <i>et al.</i> , <i>Oncotarget.</i> 2017 Apr 11; 8(15): 24668–24678. PMID: <a href="#">28160564</a> |
|                   | • Fujita K <i>et al.</i> , <i>Sci Rep.</i> 2017; 7: 42961. PMID: <a href="#">28211531</a>                        |
|                   | • Yoshioka Y <i>et al.</i> , <i>Nat Commun.</i> 2014 Apr 7;5:3591. PMID: <a href="#">24710016</a>                |
|                   | • Saito S <i>et al.</i> , <i>Sci Rep.</i> 2018 Mar 5;8(1):3997. PMID: <a href="#">29507392</a>                   |
|                   | • Yagi Y <i>et al.</i> , <i>Neurosci Lett.</i> 2017 Jan 1;636:48-57. PMID: <a href="#">27780738</a>              |
|                   | • Ueda K <i>et al.</i> , <i>Sci Rep.</i> 2014 Aug 29;4:6232. PMID: <a href="#">25167841</a>                      |

## ANTIBODY CHARACTERIZATION



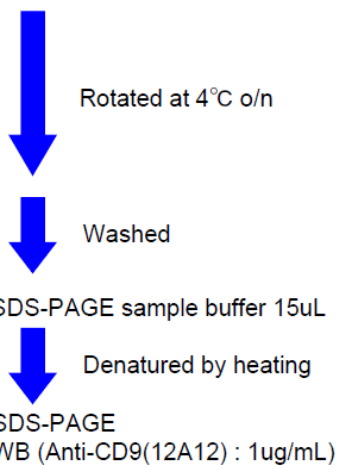
**Fig.1 Western blot** analysis of CD9 in C32 cell Exosome with anti-CD9 (12A12) antibody



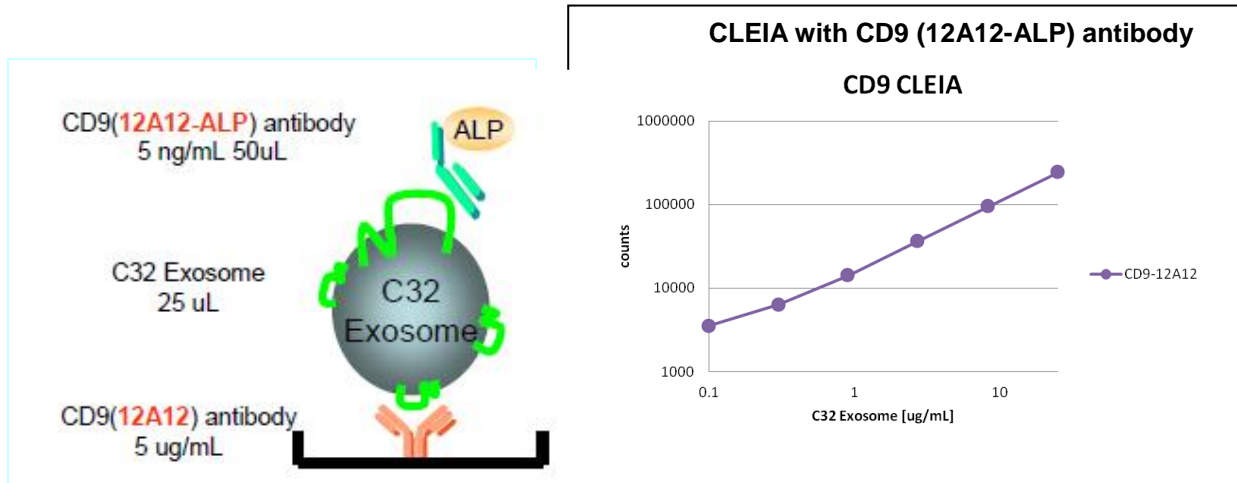
**Fig.2 Immunoprecipitation** in Human serum exosome

### Protocol

Sample	
Serum	150uL
+ Anti-CD9(12A12)	1ug (Solid phase Magnetic bead)
PBS	150uL



## ANTIBODY CHARACTERIZATION



**Fig.3** ELISA data of C32 cell exosome with anti-CD9 (12A12-ALP) antibody (5 ng/mL)

### RELATED PRODUCT:

Product Name	Application	Quantity	Maker	Cat#
Anti CD9 (12A12) Monoclonal Antibody	WB / IP / ELISA	100 ug	CAC	SHI-EXO-M01
Anti CD63 (8A12) Monoclonal Antibody	WB / IP	100 ug	CAC	SHI-EXO-M02
Anti CD81 (12C4) Monoclonal Antibody	WB / IP	100 ug	CAC	SHI-EXO-M03

For research use only, Not for diagnostic use.



**COSMO BIO Co., LTD.**

【JAPAN】  
 TOYO EKIMAE BLDG. 2-20, TOYO 2-CHOME,  
 KOTO-KU. TOKYO 135-0016, JAPAN  
 Phone: +81-3-5632-9610  
 FAX: +81-3-5632-9619  
 URL: <https://www.cosmobio.co.jp/>



**COSMO BIO USA**

【Outside Japan】  
 2792 Loker Ave West, Suite 101  
 Carlsbad, CA 92010, USA  
 email: [info@cosmobioussa.com](mailto:info@cosmobioussa.com)  
 Phone/FAX: (+1) 760-431-4600  
 URL: [www.cosmobioussa.com](http://www.cosmobioussa.com)