International Application No.: PCT/JP2012/083612

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.

Product type Primary antibody

Immunogen Human CD9 (a.a. 113-195)

Rased in Mouse
Myeloma Clone number 12A12

Clone number 12A12 Isotype IgG2b

Source Culture supernatant

Purification Affinity purified by Protein G

Buffer Phosphate buffered saline containing 0.1% NaN₃ as a preservative

Concentration1 mg / mLVolume100 uLLabelUnlabeledSpecificityHuman CD9

Reactivity Human and Bovine. No cross-reactivity with Rat and Mouse; Other species are not

tested.

Storage Store below - 40°C

Aliquot to avoid cycles of freeze/thaw.

Application notes Recommended dilutions

- Western blotting: 1/500 1/2,000 (0.5 2ug/mL, non-reductive condition)
- Immunoprecipitation: 1/200 1/1,000 (1- 5ug/mL)
 - * Experiment example : Serum Exosome
- ELISA: 1/500 1/200,000 (5ng/mL 0.5ug/mL)
- Flow cytometry: 1/100~1/1,000 (1- 10ug/mL)
- **Immunofluorescence**: 1/100~1/1,000 (1- 10ug/mL)
- · Electron microscopy

Other applications have not been tested.

Optimal dilutions/concentrations should be determined by the end user.

References

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- Matsuzaki K et al., Oncotarget. 2017 Apr 11; 8(15): 24668–24678. PMID: <u>28160564</u>
- Fujita K et al., Sci Rep. 2017; 7: 42961. PMID: 28211531
- Yoshioka Y et al., Nat Commun. 2014 Apr 7;5:3591. PMID: 24710016
- Saito S et al., Sci Rep. 2018 Mar 5;8(1):3997. PMID: <u>29507392</u>
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- Ueda K et al., Sci Rep. 2014 Aug 29;4:6232. PMID: 25167841

ANTIBODY CHARACTERIZATION

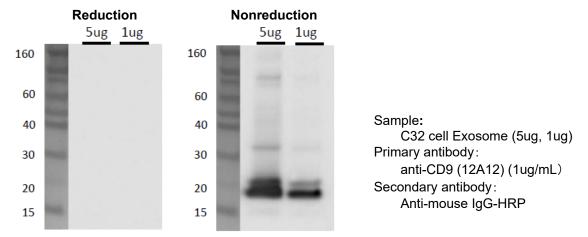


Fig.1 Western blot analysis of CD9 in C32 cell Exosome with anti-CD9 (12A12) antibody

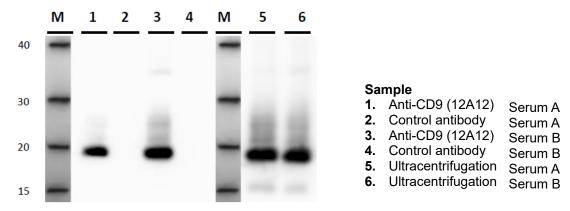
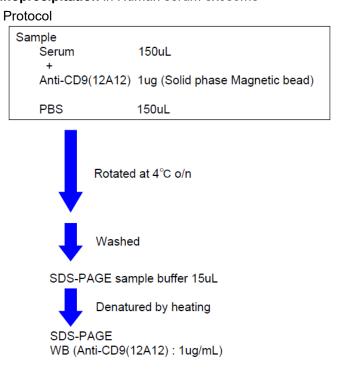
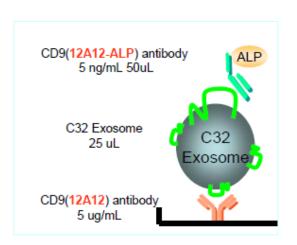


Fig.2 Immunoprecipitation in Human serum exosome



ANTIBODY CHARACTERIZATION



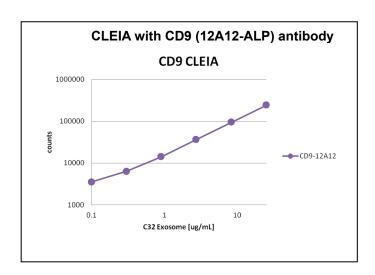


Fig.3 ELISA data of C32 cell exosome with anti-CD9 (12A12-ALP) antibody (5 ng/mL)

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