



MONOCLONAL ANTIBODY

For research use only, Not for diagnostic use.

Catalog No. SHI-EXO-M03

Anti CD81 [Clone : 12C4]

BACKGROUND

CD81 (TAPA-1) is a cell surface protein which belongs to the tetraspanin superfamily. CD81 is identified as a component of the B lymphocyte receptor (BCR) and as a receptor for the Hepatitis C Virus.

Product type	Primary antibody
Immunogen	Human CD81 (a.a 36-54)
Raised in	Mouse
Myeloma	-
Clone number	12C4
Isotype	IgG2a
Source	Culture supernatant
Purification	Affinity purified by Protein G
Buffer	Phosphate buffered saline containing 0.1% NaN ₃ as a preservative
Concentration	1 mg / mL
Volume	1 mg / 5mg / 10mg
Label	Unlabeled
Specificity	Human CD81
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	<ul style="list-style-type: none">• Western blotting: 1/500 - 1/2,000 (0.5 - 2ug/mL, non-reductive condition)
Recommended dilutions	<ul style="list-style-type: none">• Immunoprecipitation: 1/200 – 1/1,000 (1- 5ug/mL) * Experiment example : Serum and Culture supernatant 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	<ul style="list-style-type: none">• Takahashi A <i>et al.</i>, <i>Nat Commun.</i> 2017 May 16;8:15287. PMID: 28508895• Somiya M <i>et al.</i>, <i>J Extracell Vesicles.</i> 2018 Feb 21;7(1):1440132. PMID: 29511463
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ANTIBODY CHARACTERIZATION

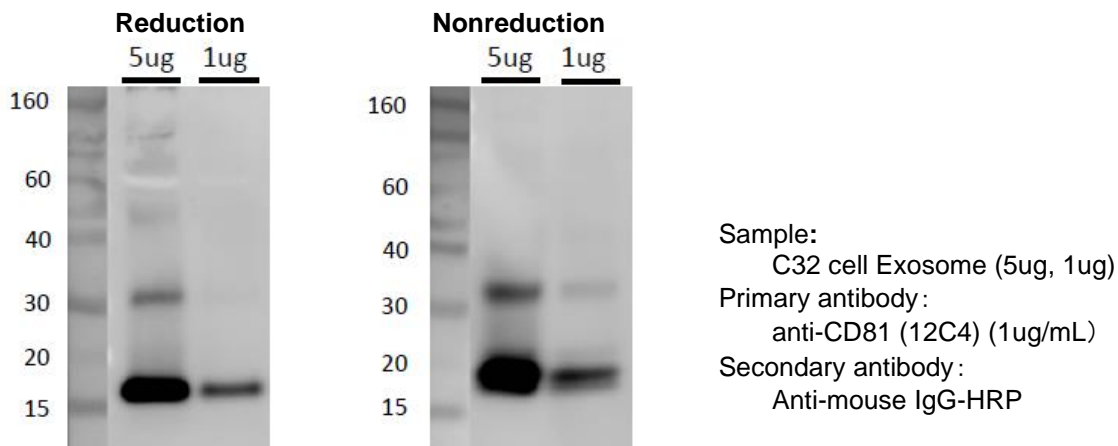


Fig.1 Western blot analysis of CD81 in C32 cell Exosome with anti-CD81 (12C4) antibody

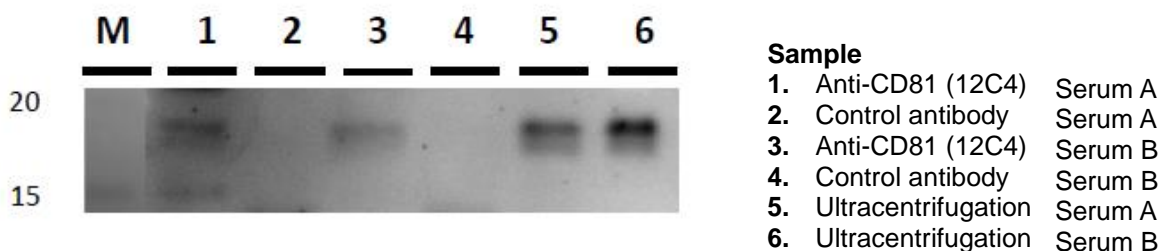
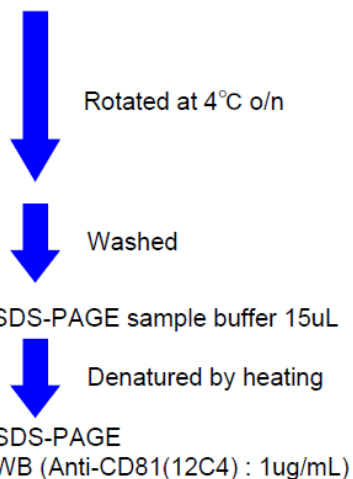


Fig.2 Immunoprecipitation in Human serum exosome

Protocol

Sample	
Serum	150uL
+ Anti-CD81(12C4)	1ug (Solid phase Magnetic bead)
PBS	150uL



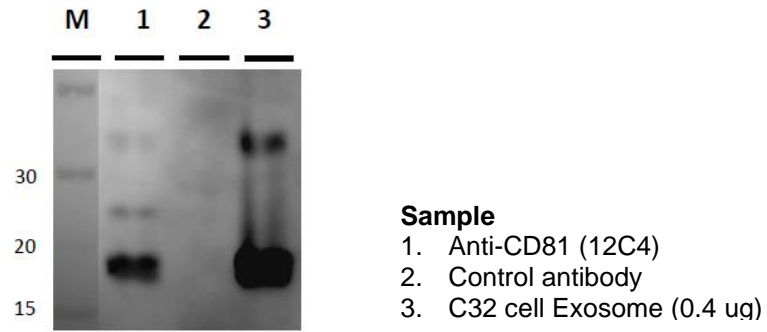
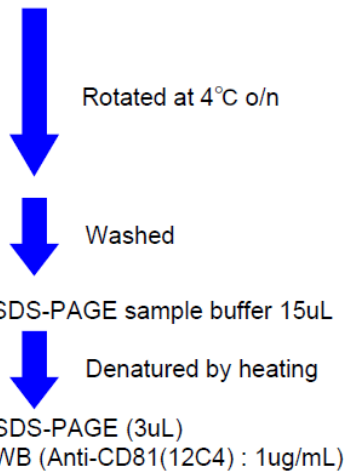


Fig.3 Immunoprecipitation in C32 cell (Melanoma cell line) Exosome

Protocol

Sample	
C32 cell Exosome	2 ug
+	
Anti-CD81(12C4)	1ug (Solid phase Magnetic bead)
PBS+1%BSA	200uL(Total)



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