



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.

<b>Product type</b>	Primary antibody
<b>Immunogen</b>	Human CD81 (a.a 36-54)
<b>Raised in</b>	Mouse
<b>Myeloma</b>	-
<b>Clone number</b>	12C4
<b>Isotype</b>	IgG2a
<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 CD81
<b>Cross reactivity</b>	Human and Bovine. Other species is not tested.
<b>Storage</b>	Store below - 40°C Aliquot to avoid cycles of freeze/thaw.

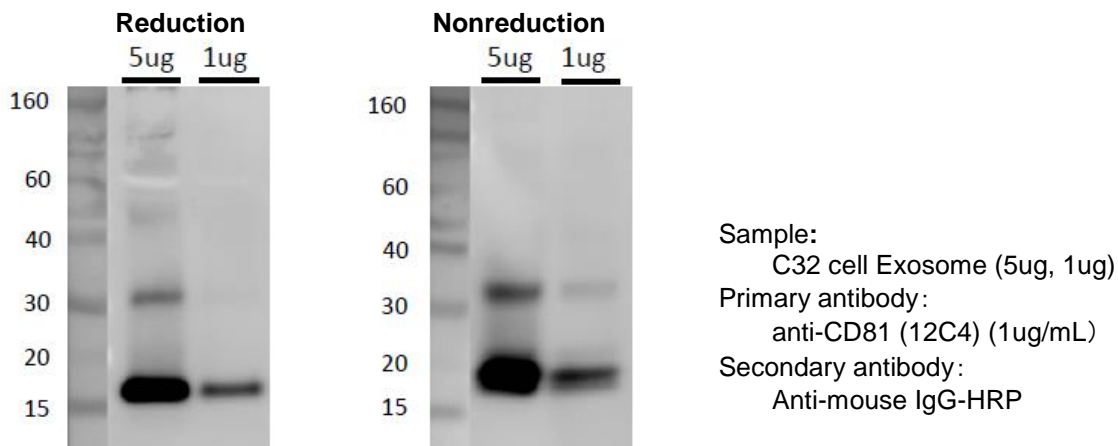
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<b>Application notes</b>	• <b>Western blotting:</b> 1/500 - 1/2,000 (0.5 - 2ug/mL, non-reductive condition)
<b>Recommended dilutions</b>	• <b>Immunoprecipitation:</b> 1/200 – 1/1,000 (1- 5ug/mL) * Experiment example : Serum and Culture supernatant Exosome

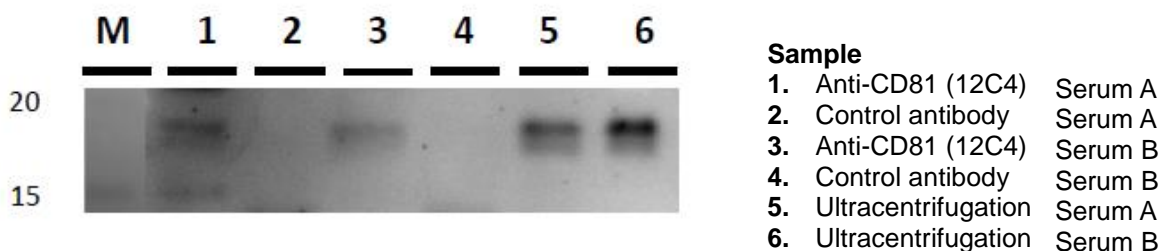
Other applications have not been tested.  
Optimal dilutions/concentrations should be determined by the end user.

<b>References</b>	• Takahashi A <i>et al.</i> , <i>Nat Commun.</i> 2017 May 16;8:15287. PMID: <a href="#">28508895</a> • Somiya M <i>et al.</i> , <i>J Extracell Vesicles.</i> 2018 Feb 21;7(1):1440132. PMID: <a href="#">29511463</a>
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**ANTIBODY CHARACTERIZATION**



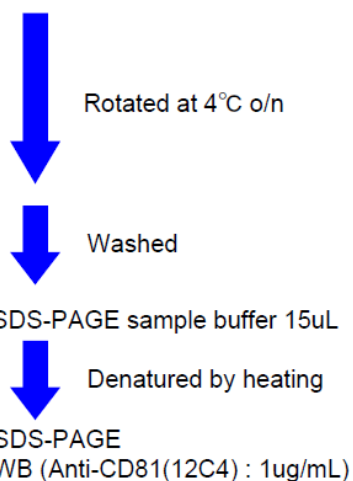
**Fig.1 Western blot analysis of CD81 in C32 cell Exosome with anti-CD81 (12C4) antibody**

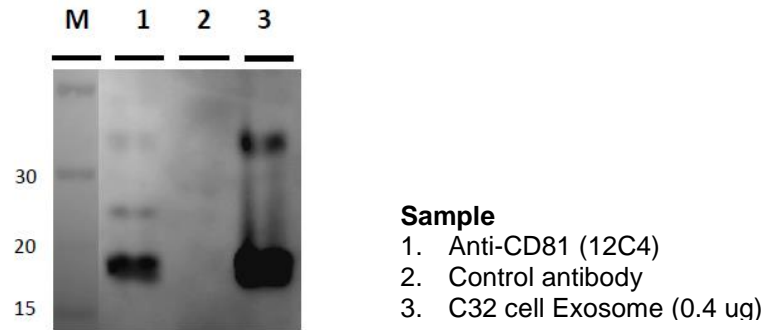


**Fig.2 Immunoprecipitation in Human serum exosome**

**Protocol**

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

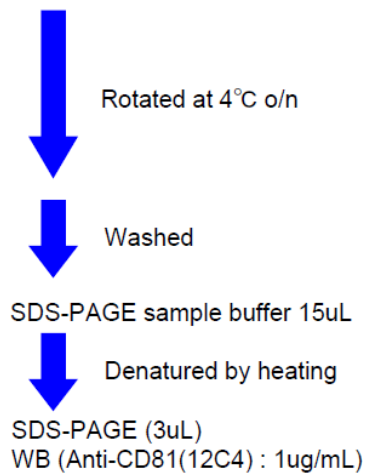




**Fig.3 Immunoprecipitation in C32 cell (Melanoma cell line) Exosome**

**Protocol**

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



**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

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