

# Exosome CD9/CD63/CD81

## mAb Set-Biotin

### PRODUCT DESCRIPTION

Exosome CD9/CD63/CD81 mAb Set-Biotin is designed for the customized isolation and analysis of exosomes or microvesicles, called “ Extracellular Vesicles (EVs)”, with ExoCap™ Streptavidin Kit. CD9, CD63 and CD81 are the representative exosome surface marker. Exosomes are extracellular vesicles secreted by most cell types and contain various marker proteins and RNAs, such as microRNA and fragmented mRNA.

### PRODUCT COMPONENTS

PRODUCT	CLONE	ISOTYPE	QUANTITY
<b>Anti-CD9 mAb-Biotin</b>	A100-4	Mouse IgG2a κ	10 µg /50 µL
<b>Anti-CD63 (LAMP-3) mAb-Biotin</b>	C047-1	Mouse IgG2b κ	10 µg /50 µL
<b>Anti-CD81 (TAPA1) mAb-Biotin</b>	A103-10	Mouse IgG2a κ	10 µg /50 µL

**FORMULATION** PBS containing 1% BSA and 0.1% ProClin 950

**STORAGE** Upon receipt store all components at 4°C.

### PROTOCOL for Beads Preparation

#### Beads Preparation

##### 1: Preparation of Streptavidin Magnetic Beads with biotinylated antibody

For each antibody

Streptavidin Magnetic Beads	Washing/Dilution Buffer for re-suspending	Biotinylated antibody	Final re-suspending volume
0.5 mL	1.0 mL	5 µg	0.5 mL
0.66 mL	1.0 mL	6.6 µg	0.66 mL
1.0 mL	1.0 mL	10 µg	1.0 mL

- 1) Suspend **Streptavidin Magnetic Beads** (MBL; code no. MEX-SA) by vortex, then transfer the required volume of the beads slurry into a 2 mL tube according to the above table.
- 2) Collect the beads by placing the tube on magnetic stand for about 1 minute and discard the supernatant carefully.
- 3) Re-suspend the beads with 1 mL of **Washing/Dilution Buffer** (MBL; code no. MEX-SA).

4) Add recommended volume\* of **biotinylated antibody** into the tube (see above table).

**\*Note:** The ratio of antibody to magnetic beads is an important parameter to maximize the signal-to-noise ratio. It is recommended to apply excess amount of antibody for each assay because ligand-free binding site of streptavidin could cause the increase of background noise, due to undesirable non-specific adsorption. For instance, it is shown that a kind of alkaline phosphatase has some non-specific binding/adsorption to ligand free streptavidin beads.

5) Rotate the tube for 30-60 minutes at room temperature or 2-8°C.

6) Collect the beads by magnetic separation and discard the supernatant.

7) Wash the beads 3 times with 0.5 mL of **Washing/Dilution Buffer**.

8) Re-suspend the beads with **Washing/Dilution Buffer** with reference to the above table.

## 2: Preparation of Capture Beads

(Mixture of Streptavidin Magnetic beads with biotinylated antibody)

For Mix mode (CD9 beads : CD63 beads : CD81 beads = 1 : 1 : 1)

CD9 beads	CD63 beads	CD81 beads	Final volume	Test size		
				WB	FCM or CLEIA	qRT- PCR
0.5 mL	0.5 mL	0.5 mL	1.5 mL	15 tests	120 tests	6 tests
0.66 mL	0.66 mL	0.66 mL	1.98 mL	19 tests	158 tests	7 tests

9) Mix the each antibody beads (prepared in step 8) equally if desired with reference to the above table (Mix mode).

10) Streptavidin Magnetic beads with biotinylated antibody (**Capture Beads**) can be stored at 2-8°C. The storage period depends on the original antibody stability.

## Related Products

Code	Name	Clone	Volume/Package	Product Type	Isotype	Application	Cross reactivity
MEX001-3	Anti-CD9 mAb	A100-4	100 µg/100 µL	non-labeled mAb	Mouse IgG2a	WB, IP, FCM	Hu, Mky
MEX002-3	Anti-CD63 (LAMP-3) mAb	C047-1	100 µg/100 µL	non-labeled mAb	Mouse IgG2b	WB, IP, FCM	Hu, Mky
MEX003-3	Anti-CD81 (TAPA1) mAb	A103-10	100 µg/100 µL	non-labeled mAb	Mouse IgG2a	WB, IP, FCM	Hu, Ham, Mky
MEX001-6	Anti-CD9 mAb-Biotin	A100-4	50 µg/50 µL	Biotinylated mAb	Mouse IgG2a	WB, FCM	Hu
MEX002-6	Anti-CD63 (LAMP-3) mAb-Biotin	C047-1	50 µg/50 µL	Biotinylated mAb	Mouse IgG2b	WB, FCM	Hu
MEX003-6	Anti-CD81 (TAPA1) mAb-Biotin	A103-10	50 µg/50 µL	Biotinylated mAb	Mouse IgG2a	WB, FCM	Hu
MEX004-6	Anti-CD326 (EpCAM) mAb-Biotin	B8-4	50 µg/50 µL	Biotinylated mAb	Mouse IgG1	FCM	Hu
M075-6	Mouse IgG1 (isotype control)-Biotin	2E12	50 µg/50 µL	Biotinylated mAb	-	FCM	-
M076-6	Mouse IgG2a (isotype control)-Biotin	6H3	50 µg/50 µL	Biotinylated mAb	-	FCM	-
M077-6	Mouse IgG2b (isotype control)-Biotin	3D12	50 µg/50 µL	Biotinylated mAb	-	FCM	-
M078-6	Mouse IgG3 (isotype control)-Biotin	6A3	50 µg/50 µL	Biotinylated mAb	-	-	-
MEX-SA	ExoCap™ Streptavidin Kit	-	1 kit	-	-	-	-
MEX1001	ExoDiluent for Immunoassay	-	50 mL	-	-	-	-
MEX-E	ExoCap™ Nucleic Acid Elution Buffer	-	20 assays	-	-	-	-
3190	Magnetic Rack	-	1 unit (1.5 mL x 8 tubes)	-	-	-	-

Other related products are also available.

Please visit our website at <http://ruo.mbl.co.jp/>. You can check the updated information on website.

## Manufacturer



MEDICAL & BIOLOGICAL LABORATORIES CO., LTD.

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