#### VII. APPENDIX A

Name of reagent, commercial kit or chemical substances and equipment

Company

Reagents

Adenosine 5' diphosphate (ADP)

Sigma

Collagen

Sigma

Epinephrine

The Government

Pharmaceutical

Organization (GPO)

Ristocetin

Sigma

Poly-L lysine

Sigma

Commercial kits

Platelet factor 4 (PF4) ELISA kit

Diagnostica stago

 $\beta$ -Thromboglobulin ( $\beta$ -TG) ELISA kit

Diagnostica stago

Chemical substances

Aspirin

Bayer®

Bovine serum albumin (BSA)

Sigma

Company

# Name of reagent, commercial kit or chemical substances and equipment

# Chemical substances

Caffeine	Maxway
Calcium chloride (CaCl <sub>2</sub> )	Merck
Ethylenediaminetetraacetic acid dipotassium dihydrate;	Fiuka
EDTA $(C_{10}H_{14}K_2H_2O_8.2H_2O)$	
Glyoxal	Fluka
N-[2-hydroxyethy] piperazine-N [2-ethanesulfonic acid]	Sigma
(HEPES)	
N-ethyl maleimide (NEM)	Fluka
Paraformaldehyde	Sigma
37% Formaldehyde	Sigma
50% Glutaraldehyde for SEM	Sigma
Potassium chloride (KCl)	Merck
Potassium dihydrogen phosphate (KH <sub>2</sub> PO <sub>4</sub> )	Merck
Sodium chloride (NaCl)	Merck
Sodium azide (NaN <sub>3</sub> )	Merck
Sodium dihydrogen phosphate dihydrate	Merck
(NaH <sub>2</sub> PO <sub>4</sub> . 2H <sub>2</sub> O)	
Tri sodium citrate dihydrate (C <sub>6</sub> H <sub>5</sub> Na <sub>3</sub> O <sub>7</sub> .2H <sub>2</sub> O)	Merck
Theophylline Control of the Control	Merck

Name of reagent, commercial kit or chemical substances

**Company** 

and equipment

# Recombinant protein

Annexin V-FITC

Caltag

#### Monoclonal antibodies

Anti CD42b-FITC

Caltag

Anti CD63-RPE

Caltag

Anti GPA-RPE

Caltag

Isotypc control IgG-FITC

Caltag

Isotype control IgG-RPE

Caltag

#### Equipment

Automatic blood cell analyzer (Hemacel)

Hycell

Centrifuge (H-103RS)

KOKUSAN

Flow cytometer (FACSort)

Becton Dickinson

Scanning electron microscopy (JSM-840A)

**JEOL** 

#### APPENDIX B

# Protocol for preparation of reagents

#### 1. 3.2% tri-sodium citrate (0.106 M)

Tri-sodium citrate dihydrate (C<sub>6</sub>H<sub>5</sub>Na<sub>3</sub>O<sub>7</sub>.2H<sub>2</sub>O) 3.2 gm

Distilled water (DW; non ionic) 100 mL

The solution was filtered with filter paper (Whatman No.1) and kept at room temperature (RT).

# 2. Anti platelet mixture

Aspirin (3 tablets of 500 mg tablet)

3.2% tri-sodium citrate solution

75 mL

The solutions stirred at RT overnight and then add;

Caffeine

0.625 gm

Theophylline

0.313 gm

 $NaN_3$  0.1 gm

The solution was adjusted the final volume to 100~mL and stirred at RT for 2~hr. After that filtered with  $0.45~\mu m$  membrane filter and kept in light protect bottle at RT.

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#### 3. Phosphate buffer saline (PBS) pH 7.3

NaCl	8.0	gm
KCI - 918191	0.2	gm
Na <sub>2</sub> HPO <sub>4</sub>	1.15	gm
KH <sub>2</sub> PO <sub>4</sub>	0.2	gm
DW (non ionic)	1000	mL

The pH was adjusted to 7.3, the solution for cell culture, must be filtered with 0.2 µm membrane filter or autoclaved at the condition of 121°C with the pressure of 15 pound/inch² for 15 min. It was kept at RT.

#### 4. Annexin V buffer (AVB)

HEPES	2.383	gm
NaCl	8.182	gm
CaCl <sub>2</sub>	0.278	gm
NaN <sub>3</sub>	0195	gm
Bovine serum albumin (BSA)	0.01	gm
DW (non ionic)	1000	mL

The solution was filtered with 0.45 µm membrane filter and kept at 4°C.

# 5. 0.05% formaldehyde in AVB

37% formaldehyde 1 mL

AVB solution 739 mL

The solution was filtered with 0.45  $\,\mu m$  membrane filter and kept at RT.

#### 6. 0.2 M phosphate buffer pH 7.3

# Stock solution 0.2 M Sodium phosphate monobasic (Solution A)

NaH<sub>2</sub>PO<sub>4</sub>. 2H<sub>2</sub>O 31.21 gm

DW (non ionic) 1000 mL

# Stock solution 0.2 M Sodium phosphate dibasic (Solution B)

Na<sub>2</sub>HPO<sub>4</sub>. 2H<sub>2</sub>O 35.61 gm

DW (non ionic) 1000 mL

The solution was filtered with 0.45 µm membrane filter and kept at RT.

# 0.2 M phosphate buffer working pH 7.3

Solution A 230 mL
Solution B 770 mL

The solution was stirred at RT for 15 min and kept at RT

# 0.1 M phosphate buffer working pH 7.3

0.2 M phosphate buffer 100 mL

DW (non ionic) 100 mL

The solution was kept at RT.

# 7. 0.25% glutaraldehyde in 0.2 M phosphate buffer pH 7.3

50% glutaraldehyde 100  $\mu$ L 0.2 M phosphate buffer 19.9 mL

# 8. 2% glutaraldehyde in 0.1 M phosphate buffer pH 7.3

50% glutaraldehyde 800  $\mu$ L 0.1 M phosphate buffer 19.2 mL

# 9. 0.2% glyoxal with 0.4% paraformaldehyde fixative solution

#### 0.4% glyoxal

40% glyoxal 1 mL PBS pH7.3 99 mL

# 0.8% paraformaldehyde

Paraformaldehyde 0.8 gm
PBS pH 7.3 100 mL

Mixture solution of 0.2% glyoxal with 0.4% paraformaldehyde consisted of 0.8% paraformaldehyde 100 mL and 0.4% glyoxal 100 mL and stirred at RT for 15 min. It was kept in light protect bottle at 4°C.

#### 10. Incubation buffer

Tris /HCl 1.211 gm

DW (non ionic) 1000 mL

The solution was adjusted pH to 7.4 by 2 N HCl. It was filtered with 0.45  $\mu m$  membrane filter and kept at RT.

#### 11. 10 mM N-ethyl maleimide (NEM)

NEM 0.125 gm

Incubation buffer 100 mL

The solution was kept at RT.

#### 12. 2.5 mM EDTA

EDTA 0.101 gm

Incubation buffer 100 mL

The solution was kept at RT.

# 13. CPDA-1-0.1% BSA-PBS pH 7.3

# 0.1%BSA-PBS pH 7.3

BSA 1 gm

PBS pH7.3 1000 mL

The solution was filtered with 0.45 µm membrane filter and kept at 4°C

#### CPDA-1-0.1%BSA-PBS pH 7.3

CPDA-1 (solution) 10 mL

0.1% BSA-PBS pH 7.3 70 mL

The solution was kept at 4°C

# 14. 1% formaldehyde in CPDA-1-0.1% BSA-PBS pH 7.3

37% formaldehyde 1 mL

CPDA-1-0.1% BSA-PBS pH 7.3 36 mL

The solution was kept at 4°C

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