

miRNA Screening Panel (Platelet, 96 well format)

Catalog # KA6513 Size 1 Kit

Applications

miRNA ID	platelet enrichment	platelet function	other cardiovascular functions
hsa-miR-126-3p	+++	platelet activation	
hsa-miR-223-3p	+++	aggregation and granule secretion	
hsa-miR-197-3p	+++	platelet activation	
hsa-miR-191-5p	+++	platelet activation	
hsa-miR-24-3p	++	platelet activation	monocyte differentiation
hsa-miR-21-5p	++	platelet biogenesis	inhibits cell growth in VSMCs
hsa-miR-28-3p	++	megakaryocyte differentiation	
hsa-miR-320a	++		insulin signaling, angiogenesis, progression of retinopathy
hsa-miR-150-5p	+	platelet activation, megakaryocytopoiesis	insulin signaling, angiogenesis, progression of retinopathy
hsa-miR-27b-3p	+	megakaryocyte differentiation	angiogenesis, vascular disease and vascular aging, progression of retinopathy
hsa-miR-122-5p	-		fatty acid and cholesterol synthesis in hepatocytes

miRNA ID	platelet enrichment	main cellular origin in plasma	validated pathways/targets
hsa-miR-126-3p	+++	platelets, megakaryocytes & endothelial cells	VEGF signaling: SPRED1 and PK3R2/p85-B1; Vascular inflammatory pathways: VCAM-1
hsa-miR-223-3p	+++	platelets & megakaryocytes	P2Y12 receptor; RPS6KB1/HIF-1a signaling pathway
hsa-miR-197-3p	+++	platelets, megakaryocytes & endothelial cells	
hsa-miR-191-5p	+++	platelets & endothelial cells	
hsa-miR-24-3p	++	platelets & endothelial cells, monocytes	PDGF-BB signaling: GATA2, PAK4; Vascularity, cardiac function, and infarct size after myocardial infarction
hsa-miR-21-5p	++	vascular smooth muscle cells, endothelial cells, cardiac fibroblasts, and cardiomyocytes, platelets	PTEN, BMPR2, WWP1, WASp
hsa-miR-28-3p	++	platelets & hematopoietic cells	
hsa-miR-320a	++	platelets & endothelial cells	Survivin, VEGF
hsa-miR-150-5p	+	leukocytes, megakaryocytes & monocytes	c-Myb, VEGF-a, HIF-1a
hsa-miR-27b-3p	+	platelets & vasculature	PPAR γ , SMAD7
hsa-miR-122-5p	-	liver tissue	multiple genes required for hepatocyte differentiation and fatty acid synthesis

Screening

Summary of evidence for miRNA platelet biomarkers included in the kit.

Cycler

Cycler

PCR cycler compatibility

Specification

Product Description

miRNA Screening Panel enables the simple and standardized analysis of specific circulating microRNAs in human serum and plasma, which reflects platelet function.

Supplied Product

Kit content:

A. Serum/Plasma RNA extraction

1. Lysis Buffer
2. Protein Precipitation Buffer
3. Wash Buffer 1
4. Wash Buffer 2
5. RNase-free water
6. Spin columns
7. Collection tube 1.5 mL
8. Collection tube 2 mL

B. cDNA synthesis

1. RNA spike-in Mix
2. cDNA spike-in Mix
2. 5x RT Buffer
3. 10x RT Enzyme Mix
4. RNase-free water
5. 2x miGreen Mix
6. Glycogen (5mg/mL)

C. qPCR

1. Primer coated 96 well qPCR plates

Pack Size

48 samples

Suitable Sample

Serum, Plasma

Sample Size

200 µL

Reactivity

Human

Regulation Status

For research use only (RUO)

Quality Control Testing

Screening

Storage Instruction

Store the kit at -20°C.

Note

Cycler
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PCR cycler compatibility

Applications

- Screening

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