

Oligo GEMArray[®] DNA Microarray:

Human Cardiovascular Disease Biomarkers

Catalog Number

OHS-037
EHS-037

Format:

HybTube (Standard protocol)
HybPlate (Higher throughput protocol)

Description

The Oligo GEMArray[®] Human Cardiovascular Disease Biomarkers Microarray profiles the expression of 113 genes useful as molecular markers for cardiovascular disease progression. This array is designed with clinical researchers and research pathologists in mind. Genes that may serve as diagnosis and/or prognosis markers for the principal cardiovascular diseases, heart disease and stroke are represented. Genes involved in atherosclerosis and hypertension are represented including genes involved in the related processes of inflammation, apoptosis, and cell adhesion. Biomarkers for risk of cardiovascular disease and genes associated with a failing or infarcted heart are selected for this array based on published studies of *in vivo* and *in vitro* cardiovascular disease models. A complete expression profile of these genes should serve as an effective tool to unlock the molecular mechanisms that govern the onset and progression of cardiovascular diseases. Through a simple side-by-side hybridization experiment you can determine differential gene expression between your samples.

Functional Gene Groupings

Cell Adhesion Molecules:

Cell-Cell Adhesion: EVA1, ICAM1, ITGA7, ITGA8, ITGB1, VCAM1.

Cell-Matrix Adhesion: ITGA1, ITGA10, ITGA4, ITGA2, ITGA2B, ITGA3, ITGA5, ITGA6, ITGA7, ITGA8, ITGA9, ITGAE, ITGAL, ITGAM, ITGAV, ITGAX, ITGB1, ITGB2, ITGB3, ITGB4, ITGB5, ITGB6, ITGB7, ITGB8.

Other Cell Adhesion Molecules: CCL2 (MCP-1), CD40LG (TNFSF5 / CD40 Ligand), IL18, IL8, MSLN, PECAM1, SAA1, SELE (E-Selectin), SELL (L-Selectin), SELP (P-Selectin), SELPLG, TNF, VWF.

Immune Response Related Molecules:

Cellular Defense Response: CCR2, IL10, IL18, ITGB1.

Cytokine Biosynthesis: APOA2, CCR2, IFNG, IL10, IL18, IL1B, IL1RN, SAA1.

Humoral Immune Response: CCL2 (MCP-1), CCR2, CD40 (TNFRSF5), CRLF1, IL1B, IL6, ITGB2, NFKB1.

Immune Cell Activation: APOA2, CD40 (TNFRSF5), IL8, CD40LG (TNFSF5 / CD40 Ligand), IL10, IL18, NOS2A.

Inflammatory Response: CCL2 (MCP-1), CCR2, CD40 (TNFRSF5), CD40LG (TNFSF5 / CD40 Ligand), CRP, IL10, IL1B, IL1RN, IL8, ITGB2, NFKB1, NOS2A, PLA2G7 (Lp-PLA2), SAA1, SELE (E-Selectin), TNF.

Other Genes Related to the Immune Response: APOE, F3, FAS, FASLG (FASL, TNFSF6), IL6ST, LTA, LTB, VWF.

Apoptosis Genes:

Anti-apoptosis: CCL2 (MCP-1), CD40LG (TNFSF5 / CD40 Ligand), FAS, IL10, NFKB1, TNF.

Induction of Apoptosis: APOE, FAS, FASLG (FASL, TNFSF6), IL18, LTA.

Other Chromatin Modification Molecules: CD40 (TNFRSF5), IL1B, ITGB2, TNFRSF1A (TNF-RI), TNFRSF1B (TNF-RII).

Extracellular Matrix (ECM) Molecules:

ECM Proteases: ACE, F7, ITGA10, ITGA2, LPA (Lipoprotein A), MMP1, MMP13, MMP2, MMP9, PAPP, PLAT (tPA), PLAU.

ECM Protease Inhibitors: LPA (Lipoprotein A), SERPINE1 (PAI-1), TIMP1.

Fibrinogen Complex: FGA (Fibrinogen alpha), FGB (Fibrinogen beta), FGG.

Other ECM Molecules: AMH, APOA1, APOA2, APOA4, APOA5, APOB, APOC1, APOC2, APOC3, APOD, APOE, APOF, APOH, CCL2 (MCP-1), CRLF1, CRP, CTF1, EDN1 (ET1, endothelin 1), EDN2 (ET2, endothelin 2), EDN3

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(ET3, endothelin 3), FASLG (FASL, TNFSF6), GRN, IFNG, IL10, IL18, IL1B, IL1RN, IL6, IL8, NPPA, NPPB, PLA2G7 (Lp-PLA2), PLTP, PON1, PON2, SAA1, TNFRSF1A (TNF-RI), VWF.

Cell Growth Related Molecules:

Cell Proliferation: CTF1, EDN1 (ET1, endothelin 1), FGA (Fibrinogen alpha), FGB (Fibrinogen beta), FGG (Fibrinogen gamma), GRN, IL1B, IL6, IL8, TIMP1.

Growth Factors: AMH, EDN2 (ET2, endothelin 2), GLG1, GRN, IL10, IL18, IL1B, IL1RN, IL6, IL8, VWF.

Other Molecules Related to Cell Growth: IFNG, ITGAL, ITGB2, NPPB, PAPP, PECAM1, PPARG, SELL.

Blood Coagulation Related Molecules:

Platelet Activation: CD40 (TNFRSF5), CD40LG (TNFSF5 / CD40 Ligand), SAA1, VWF.

Other Genes Related to Blood Coagulation: F3, F7, FGA (Fibrinogen alpha), FGB (Fibrinogen beta), FGG (Fibrinogen gamma), ITGA2, ITGB3, LPA (Lipoprotein A), PLAT (tPA), PLAU (uPA), PLAUR (uPAR), SERPINE1 (PAI-1), THBD (thrombomodulin).

Circulation Genes:

Regulation of Blood Pressure: ACE, EDN1 (ET1, endothelin 1), EDN2 (ET2, endothelin 2), EDN3 (ET3, endothelin 3), FGA (Fibrinogen alpha), FGB (Fibrinogen beta), FGG (Fibrinogen gamma), NPPA, NPPB.

Regulation of Heart Contraction Rate: TNNT2, TNNT3.

Other Genes Related to Circulation: APOA1, APOA4, APOB, APOC2, APOE, DBP, LPA (Lipoprotein A), MTHFR, OLR1 (oxLDL).

Lipid Metabolism Related Genes:

Cholesterol Metabolism: APOA1, APOB, APOE, APOF, CETP.

Lipoprotein Metabolism: APOA1, APOA2, APOA4, APOA5, APOC1, APOC2, APOC3, APOD, APOE, APOF.

Other Genes Related to Lipid Metabolism: APOC4, APOH, HSD11B1, LPA (Lipoprotein A), PLA2G7 (Lp-PLA2), PLTP, PPARG, SAA1.

Genes Associated with a Failing or Infarcted Heart: CKM, CRP, CTF1, F3, IL6ST, MB, NPPA, NPPB, TNNT1, TNNT2.

Storage Conditions

Please check the kit components immediately after you receive this package. SuperArray is only responsible for missing items reported within two (2) business days of receipt.

GEArray microarrays are shipped at ambient temperature enclosed in either a HybTube or ExpressPak Storage Box. They should be stored at -20°C upon receipt.

References

1. Blake GJ, Ridker PM. Inflammatory bio-markers and cardiovascular risk prediction. *J Intern Med.* 2002 Oct; **252** (4): 283-94.
2. Shin WS, Szuba A, Rockson SG. The role of chemokines in human cardiovascular pathology: enhanced biological insights. *Atherosclerosis.* 2002 Jan; **160** (1): 91-102.
3. Pai JK, Curhan GC, Cannuscio CC, Rifai N, Ridker PM, Rimm EB. Stability of novel plasma markers associated with cardiovascular disease: processing within 36 hours of specimen collection. *Clin Chem.* 2002 Oct; **48** (10): 1781-4.
4. Schumacher A, Seljeflot I, Sommervoll L, Christensen B, Otterstad JE, Arnesen H. Increased levels of endothelial haemostatic markers in patients with coronary heart disease. *Thromb Res.* 2002 Jan 1; **105**(1): 25-31.
5. May AE, Schmidt R, Kanse SM, Chavakis T, Stephens RW, Schomig A, Preissner KT, Neumann FJ. Urokinase receptor surface expression regulates monocyte adhesion in acute myocardial infarction. *Blood.* 2002 Nov 15; **100** (10): 3611-7.
6. Frijns CJ, Kappelle LJ. Inflammatory cell adhesion molecules in ischemic cerebrovascular disease. *Stroke.* 2002 Aug; **33** (8): 2115-22.

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Oligo GEArray® Human Cardiovascular Disease Biomarkers Microarray

Array Layout:

RPS27A	ACE	AMH	APOA1	APOA2	APOA4	APOA5	APOB
APOC1	APOC2	APOC3	APOC4	APOD	APOE	APOF	APOH
CCL2	CCR2	CD40	CD40LG	CETP	CKM	CRLF1	CRP
CTF1	DBP	EDN1	EDN2	EDN3	EVA1	F3	F7
FAS	FASLG	FGA	FGB	FGG	GLG1	GRN	HSD11B1
ICAM1	IFNG	IL10	IL18	IL1B	IL1RN	IL6	IL6ST
IL8	ITGA1	ITGA10	ITGA2	ITGA2B	ITGA3	ITGA4	ITGA5
ITGA6	ITGA7	ITGA8	ITGA9	ITGAE	ITGAL	ITGAM	ITGAV
ITGAX	ITGB1	ITGB2	ITGB3	ITGB4	ITGB5	ITGB6	ITGB7
ITGB8	LPA	LTA	LTB	MB	MMP1	MMP13	MMP2
MMP9	MSLN	MTHFR	NFKB1	NOS2A	NPPA	NPPB	OLR1
PAPPA	PECAM1	PLA2G7	PLAT	PLAU	PLAUR	PLTP	PON1
PON2	PPARG	SAA2	SELE	SELL	SEL1	SELPLG	SERPINE1
THBD	TIMP1	TNF	TNFRSF1A	TNFRSF1B	TNCF	TNNT3	TNNT2
VCAM1	VWF	PUC18	Blank	Blank	AS1R2	AS1R1	AS1
GAPD	B2M	HSPCB	HSPCB	ACTB	ACTB	BAS2C	BAS2C
	121	122	123	124	125	126	127
						127	128

Gene Table

Position	UniGene	GenBank	Symbol	Description	Gene Name
1	Hs.546292	NM_002954	RPS27A	Ribosomal protein S27a	CEP80/HUBCEP80
2	Hs.298469	NM_152831	ACE	Angiotensin I converting enzyme (peptidyl-dipeptidase A) 1	ACE1/CD143
3	Hs.112432	NM_000479	AMH	Anti-Mullerian hormone	MIF/MIS
4	Hs.93194	NM_000039	APOA1	Apolipoprotein A-I	APOA1
5	Hs.237658	NM_001643	APOA2	Apolipoprotein A-II	APOA2
6	Hs.1247	NM_000482	APOA4	Apolipoprotein A-IV	APOA4
7	Hs.283923	NM_052968	APOA5	Apolipoprotein A-V	APOA-V/APOAV
8	Hs.120759	NM_000384	APOB	Apolipoprotein B (including Ag(x) antigen)	FLDB
9	Hs.110675	NM_001645	APOC1	Apolipoprotein C-I	APOC1
10	Hs.75615	NM_000483	APOC2	Apolipoprotein C-II	MGC75082
11	Hs.73849	NM_000040	APOC3	Apolipoprotein C-III	APOCIII
12	Hs.491896	NM_001646	APOC4	Apolipoprotein C-IV	APOC4
13	Hs.522555	NM_001647	APOD	Apolipoprotein D	APOD
14	Hs.515465	NM_000041	APOE	Apolipoprotein E	AD2/APOPROTEIN
15	Hs.534302	NM_001638	APOF	Apolipoprotein F	APO-F
16	Hs.445358	NM_000042	APOH	Apolipoprotein H (beta-2-glycoprotein I)	B2G1/BG
17	Hs.303649	NM_002982	CCL2	Chemokine (C-C motif) ligand 2	GDGF-2/HC11
18	Hs.511794	NM_000648	CCR2	Chemokine (C-C motif) receptor 2	CC-CCR-2/CCR2A
19	Hs.472860	NM_001250	CD40	CD40 antigen (TNF receptor superfamily member 5)	BP50/CDW40
20	Hs.652	NM_000074	CD40LG	CD40 ligand (TNF superfamily, member 5, hyper-IgM syndrome)	CD154/CD40L
21	Hs.89538	NM_000078	CETP	Cholesteryl ester transfer protein, plasma	CETP
22	Hs.334347	NM_001824	CKM	Creatine kinase, muscle	CKMM/M-CK
23	Hs.114948	NM_004750	CRLF1	Cytokine receptor-like factor 1	CISS/CLF
24	Hs.76452	NM_000567	CRP	C-reactive protein, pentraxin-related	PTX1
25	Hs.483811	NM_001330	CTF1	Cardiotrophin 1	CT-1/CT1
26	Hs.414480	NM_001352	DBP	D site of albumin promoter (albumin D-box) binding protein	DABP
27	Hs.511899	NM_001955	EDN1	Endothelin 1	ET1
28	Hs.1407	NM_001956	EDN2	Endothelin 2	ET2
29	Hs.1408	NM_000114	EDN3	Endothelin 3	ET3
30	Hs.116651	NM_005797	EVA1	Epithelial V-like antigen 1	EVA/MPZL2
31	Hs.62192	NM_001993	F3	Coagulation factor III (thromboplastin, tissue factor)	CD142/TF
32	Hs.36989	NM_000131	F7	Coagulation factor VII (serum prothrombin conversion accelerator)	F7
33	Hs.244139	NM_152877	FAS	Fas (TNF receptor superfamily, member 6)	ALPS1A/APO-1
34	Hs.2007	NM_000639	FASLG	Fas ligand (TNF superfamily, member 6)	APT1LG1/CD178
35	Hs.351593	NM_000508	FGA	Fibrinogen, A alpha polypeptide	FIB2
36	Hs.300774	NM_005141	FGB	Fibrinogen, B beta polypeptide	FGB
37	Hs.546255	NM_021870	FGG	Fibrinogen, gamma polypeptide	FGG
38	Hs.201712	NM_012201	GLG1	Golgi apparatus protein 1	CFR-1/ESL-1
39	Hs.514220	NM_002087	GRN	Granulin	GEP/GP88
40	Hs.195040	NM_005525	HSD11B1	Hydroxysteroid (11-beta) dehydrogenase 1	11-BETA-HSD1
41	Hs.515126	NM_000201	ICAM1	Intercellular adhesion molecule 1 (CD54), human rhinovirus receptor	BB2/CD54
42	Hs.856	NM_000619	IFNG	Interferon, gamma	IFG/IFI
43	Hs.193717	NM_000572	IL10	Interleukin 10	CSIF/IL-10
44	Hs.83077	NM_001562	IL18	Interleukin 18 (interferon-gamma-inducing factor)	IGIF/IL-18
45	Hs.126256	NM_000576	IL1B	Interleukin 1, beta	IL-1/IL1-BETA
46	Hs.81134	NM_000577	IL1RN	Interleukin 1 receptor antagonist	ICIL-1RA/IL-1RA3
47	Hs.512234	NM_000600	IL6	Interleukin 6 (interferon, beta 2)	BSF2/HGF
48	Hs.532082	NM_002184	IL6ST	Interleukin 6 signal transducer (gp130, oncostatin M receptor)	CD130/CDW130

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Position	UniGene	GenBank	Symbol	Description	Gene Name
49	Hs.624	NM_000584	IL8	Interleukin 8	3-10C/AMCF-I
50	Hs.519304	NM_181501	ITGA1	Integrin, alpha 1	CD49a
51	Hs.158237	NM_003637	ITGA10	Integrin, alpha 10	PRO827
52	Hs.482077	NM_002203	ITGA2	Integrin, alpha 2 (CD49B, alpha 2 subunit of VLA-2 receptor)	BR/CD49B
53	Hs.411312	NM_000419	ITGA2B	Integrin, alpha 2b (platelet glycoprotein IIb of IIb/IIIa complex, antigen CD41B)	CD41/CD41B
54	Hs.265829	NM_002204	ITGA3	Integrin, alpha 3 (antigen CD49C, alpha 3 subunit of VLA-3 receptor)	CD49C/GAP-B3
55	Hs.553495	NM_000885	ITGA4	Integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor)	IA4/CD49D
56	Hs.505654	NM_002205	ITGA5	Integrin, alpha 5 (fibronectin receptor, alpha polypeptide)	CD49E/FNRA
57	Hs.133397	NM_000210	ITGA6	Integrin, alpha 6	CD49F
58	Hs.524484	NM_002206	ITGA7	Integrin, alpha 7	Integrin a7
59	Hs.171311	NM_003638	ITGA8	Integrin, alpha 8	Integrin a8
60	Hs.113157	NM_002207	ITGA9	Integrin, alpha 9	ALPHA-RLC/ITGA4L
61	Hs.513867	NM_002208	ITGAE	Integrin, alpha E (antigen CD103, human mucosal lymphocyte antigen 1; alpha polypeptide)	CD103/HUMINAE
62	Hs.174103	NM_002209	ITGAL	Integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; alpha polypeptide)	CD11A/LFA-1
63	Hs.172631	NM_000632	ITGAM	Integrin, alpha M (complement component receptor 3, alpha; also known as CD11b (p170), macrophage antigen alpha polypeptide)	CD11B/CR3A
64	Hs.436873	NM_002210	ITGAV	Integrin, alpha V (vitronectin receptor, alpha polypeptide, antigen CD51)	CD51/MSK8
65	Hs.248472	NM_000887	ITGAX	Integrin, alpha X (antigen CD11C (p150), alpha polypeptide)	CD11C
66	Hs.429052	NM_002211	ITGB1	Integrin, beta 1 (fibronectin receptor, beta polypeptide, antigen CD29 includes MDF2, MSK12)	CD29/FNRB
67	Hs.375957	NM_000211	ITGB2	Integrin, beta 2 (antigen CD18 (p95), lymphocyte function-associated antigen 1; macrophage antigen 1 (mac-1) beta subunit)	CD18/LAD
68	Hs.218040	NM_000212	ITGB3	Integrin, beta 3 (platelet glycoprotein IIIa, antigen CD61)	CD61/GP3A
69	Hs.370255	NM_000213	ITGB4	Integrin, beta 4	CD104
70	Hs.13155	NM_002213	ITGB5	Integrin, beta 5	Integrin b5
71	Hs.470399	NM_000888	ITGB6	Integrin, beta 6	Integrin b6
72	Hs.1741	NM_000889	ITGB7	Integrin, beta 7	Integrin b7
73	Hs.285724	NM_002214	ITGB8	Integrin, beta 8	Integrin b8
74	Hs.520120	NM_005577	LPA	Lipoprotein, Lp(a)	AK38/APOA
75	Hs.36	NM_000595	LTA	Lymphotoxin alpha (TNF superfamily, member 1)	CYTOKINE/ILT
76	Hs.376208	NM_002341	LTB	Lymphotoxin beta (TNF superfamily, member 3)	CYTOKINE/P33
77	Hs.517586	NM_005368	MB	Myoglobin	PVALB
78	Hs.83169	NM_002421	MMP1	Matrix metalloproteinase 1 (interstitial collagenase)	CLG/CLGN
79	Hs.2936	NM_002427	MMP13	Matrix metalloproteinase 13 (collagenase 3)	CLG3
80	Hs.513617	NM_004530	MMP2	Matrix metalloproteinase 2 (gelatinase A, 72kDa gelatinase, 72kDa type IV collagenase)	CLG4/CLG4A
81	Hs.297413	NM_004994	MMP9	Matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa type IV collagenase)	GELB/CLG4B
82	Hs.408488	NM_005823	MSLN	Mesothelin	CAK1/MPF
83	Hs.214142	NM_005957	MTHFR	5,10-methylenetetrahydrofolate reductase (NADPH)	MTHFR
84	Hs.431926	NM_003998	NFKB1	Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1 (p105)	EBP-1/KBF1
85	Hs.462525	NM_153292	NOS2A	Nitric oxide synthase 2A (inducible, hepatocytes)	HEP-NOS/INOS
86	Hs.75640	NM_006172	NPPA	Natriuretic peptide precursor A	ANF/ANP
87	Hs.219140	NM_002521	NPPB	Natriuretic peptide precursor B	BNP
88	Hs.412484	NM_002543	OLR1	Oxidised low density lipoprotein (lectin-like) receptor 1	CLEC8A/LOX1
89	Hs.494928	NM_002581	PAPPA	Pregnancy-associated plasma protein A	ASBAP2/DIPLA1
90	Hs.514412	NM_000442	PECAM1	Platelet/endothelial cell adhesion molecule (CD31 antigen)	CD31/PECAM-1
91	Hs.93304	NM_005084	PLA2G7	Phospholipase A2, group VII (platelet-activating factor acetylhydrolase, plasma)	LDL-PLA2/PAFAH
92	Hs.491582	NM_000930	PLAT	Plasminogen activator, tissue	T-PA/TPA
93	Hs.77274	NM_002658	PLAU	Plasminogen activator, urokinase	ATF/U-PA
94	Hs.466871	NM_002659	PLAUR	Plasminogen activator, urokinase receptor	CD87/UPAR
95	Hs.439312	NM_006227	PLTP	Phospholipid transfer protein	lipid transfer protein II
96	Hs.370995	NM_000446	PON1	Paraoxonase 1	ESA/PON
97	Hs.530077	NM_000305	PON2	Paraoxonase 2	PON2
98	Hs.162646	NM_015869	PPARG	Peroxisome proliferative activated receptor, gamma	PPARG1/NR1C3
99	Hs.1955	NM_030754	SAA2	Serum amyloid A2	SAA2
100	Hs.89546	NM_000450	SELE	Selectin E (endothelial adhesion molecule 1)	CD62E/ELAM
101	Hs.82848	NM_000655	SELL	Selectin L (lymphocyte adhesion molecule 1)	CD62L/HLHRC
102	Hs.73800	NM_003005	SELP	Selectin P (granule membrane protein 140kDa, antigen CD62)	CD62/CD62P
103	Hs.506670	NM_003006	SELP2	Selectin P ligand	CD162/PSGL-1
104	Hs.414795	NM_000602	SERPINE1	Serine (or cysteine) proteinase inhibitor, clade E (nexin, plasminogen activator inhibitor)	PAI/PAI-1
105	Hs.2030	NM_000361	THBD	Thrombomodulin	CD141/THRM
106	Hs.522632	NM_003254	TIMP1	Tissue inhibitor of metalloproteinase 1 (erythroid potentiating activity, collagenase)	CLG1/EPA
107	Hs.241570	NM_000594	TNF	Tumor necrosis factor (TNF superfamily, member 2)	DIF/TNF-ALPHA
108	Hs.279594	NM_001065	TNFRSF1A	Tumor necrosis factor receptor superfamily, member 1A	CD120A/FFP
109	Hs.256278	NM_001066	TNFRSF1B	Tumor necrosis factor receptor superfamily, member 1B	CD120B/P75
110	Hs.118845	NM_003280	TNNC1	Troponin C, slow	TNC/TNNC
111	Hs.512709	NM_000363	TNNI3	Troponin I, cardiac	CMH7/TNNC1
112	Hs.533613	NM_000364	TNNI2	Troponin T2, cardiac	CMD1D/CMH2
113	Hs.109225	NM_001078	VCAM1	Vascular cell adhesion molecule 1	INCAM-100
114	Hs.440848	NM_000552	VWF	Von Willebrand factor	F8WVF/VWD
115	N/A	L08752	PUC18	PUC18 Plasmid DNA	pUC18
116	Blank	Blank	Blank	Blank	
117	Blank	Blank	Blank	Blank	
118	N/A	N/A	AS1R2	Artificial Sequence 1 Related 2 (80% identity)(48/60)	N/A
119	N/A	N/A	AS1R1	Artificial Sequence 1 Related 1 (90% identity)(56/60)	N/A
120	N/A	N/A	AS1	Artificial Sequence 1	N/A
121	Hs.544577	NM_002046	GAPDH	Glyceraldehyde-3-phosphate dehydrogenase	G3PD/GAPD
122	Hs.534255	NM_004048	B2M	Beta-2-microglobulin	B2M
123	Hs.509736	NM_007355	HSPCB	Heat shock 90kDa protein 1, beta	BETA/D6S182
124	Hs.509736	NM_007355	HSPCB	Heat shock 90kDa protein 1, beta	BETA/D6S182
125	Hs.520640	NM_001101	ACTB	Actin, beta	b-Actin
126	Hs.520640	NM_001101	ACTB	Actin, beta	b-Actin
127	N/A	N/A	BAS2C	Biotinylated Artificial Sequence 2 Complementary sequence	N/A
128	N/A	N/A	BAS2C	Biotinylated Artificial Sequence 2 Complementary sequence	N/A