

A

Common all 3 cryoprotectant

Common CS10 and IRI-A

Common CS10 and IRI-B

Common IRI-A and IRI-B

Up-regulated	Symbol	log2(FC)	Padj	Coding	Gene Ontology annotations	
CS10	1	MT2A	4.5	3.3E-106	Protein coding	drug binding
	2	SERPINE1	2.6	9.6E-105	Protein coding	signaling receptor binding and protease binding
	3	NQO1	2.2	7.0E-90	Protein coding	oxidoreductase activity
	4	HMOX1	2.3	1.0E-85	Protein coding	protein homodimerization activity and oxidoreductase activity
	5	VEGF	2.9	7.5E-85	Protein coding	Growth factor activity
	6	RTL5	2.4	6.0E-78	Protein coding	Unk.
	7	TIMP4	2.5	8.8E-75	Protein coding	protease binding and metalloendopeptidase inhibitor activity
	8	LEFTY1	3.4	3.5E-53	Protein coding	cytokine activity and transforming growth factor beta receptor binding
	9	CAV1	2.1	1.7E-49	Protein coding	identical protein binding and signaling receptor binding
	10	LEFTY2	2.3	1.3E-38	Protein coding	cytokine activity and transforming growth factor beta receptor binding
IRI-A	1	MT2A	4.5	2.5E-114	Protein coding	drug binding
	2	SERPINE1	2.6	1.2E-111	Protein coding	signaling receptor binding and protease binding
	3	NQO1	2.3	4.9E-102	Protein coding	oxidoreductase activity
	4	HMOX1	2.4	2.3E-90	Protein coding	protein homodimerization activity and oxidoreductase activity
	5	VEGF	2.9	1.6E-84	Protein coding	Growth factor activity
	6	TIMP4	2.5	1.6E-80	Protein coding	protease binding and metalloendopeptidase inhibitor activity
	7	RTL5	2.3	7.5E-69	Protein coding	Unk.
	8	LEFTY1	3.3	9.1E-55	Protein coding	cytokine activity and transforming growth factor beta receptor binding
	9	ANXA1	2.9	5.6E-39	Protein coding	calcium ion binding and signaling receptor binding
	10	GLIPR1L1	3.2	6.6E-37	Protein coding	Unk.
IRI-B	1	SERPINE1	2.9	1.7E-166	Protein coding	signaling receptor binding and protease binding
	2	MT2A	4.8	8.7E-146	Protein coding	drug binding
	3	NQO1	2.7	3.3E-139	Protein coding	oxidoreductase activity
	4	HMOX1	2.9	5.8E-138	Protein coding	protein homodimerization activity and oxidoreductase activity
	5	VEGF	3.4	6.2E-122	Protein coding	Growth factor activity
	6	TIMP4	3.0	2.0E-117	Protein coding	protease binding and metalloendopeptidase inhibitor activity
	7	RTL5	2.5	1.2E-107	Protein coding	Unk.
	8	FLNC	2.5	2.0E-107	Protein coding	actin filament binding and ankyrin binding
	9	ANXA1	3.8	1.3E-87	Protein coding	calcium ion binding and signaling receptor binding
	10	MAP1A	2.2	5.0E-74	Protein coding	structural molecule activity and microtubule binding.

B

Down-regulated	Symbol	log2(FC)	Padj	Coding	Gene Ontology annotations	
CS10	1	H1-0	-2.3	7.2E-254	Protein coding	Unk.
	2	NPTX1	-4.7	1.0E-213	Protein coding	Unk.
	3	KLF15	-1.9	4.6E-65	Protein coding	DNA-binding transcription factor activity and proximal promoter DNA-binding transcription activator activity, RNA polymerase II-specific
	4	AL591742.2	-1.9	8.7E-63	RNA gene	lncRNA class
	5	SYT7	-2.0	8.0E-62	Protein coding	calcium ion binding and syntaxin binding
	6	ECEL1P1	-3.1	8.8E-49	Pseudogene	NA
	7	STON1	-2.0	1.5E-48	Protein coding	Unk.
	8	C3	-2.4	3.2E-48	Protein coding	signaling receptor binding and C5L2 anaphylatoxin chemotactic receptor binding
	9	FILIP1	-2.4	2.1E-46	Protein coding	Unk.
	10	HRC	-2.5	6.5E-43	Protein coding	calcium ion binding and ATPase binding
IRI-A	1	H1-0	-2.4	7.9E-274	Protein coding	Unk.
	2	NPTX1	-4.7	7.8E-226	Protein coding	Unk.
	3	ACTN3	-2.1	2.3E-78	Protein coding	calcium ion binding and actin binding
	4	AL591742.2	-2.1	1.4E-75	RNA gene	lncRNA class
	5	SYT7	-2.1	6.8E-73	Protein coding	calcium ion binding and syntaxin binding
	6	KLF15	-1.8	2.7E-63	Protein coding	DNA-binding transcription factor activity and proximal promoter DNA-binding transcription activator activity, RNA polymerase II-specific
	7	C3	-2.4	5.7E-52	Protein coding	signaling receptor binding and C5L2 anaphylatoxin chemotactic receptor binding
	8	KCNH2	-2.0	1.6E-51	Protein coding	protein homodimerization activity and obsolete signal transducer activity
	9	FILIP1	-2.3	1.0E-49	Protein coding	Unk.
	10	ECEL1P1	-3.1	2.7E-48	Pseudogene	NA
IRI-B	1	H1-0	-2.4	3.0E-282	Protein coding	Unk.
	2	NPTX1	-4.9	5.7E-228	Protein coding	Unk.
	3	SYT7	-2.3	1.1E-98	Protein coding	calcium ion binding and syntaxin binding
	4	ACTN3	-2.3	1.2E-77	Protein coding	calcium ion binding and actin binding
	5	AL591742.2	-2.2	4.7E-77	RNA gene	lncRNA class
	6	C3	-2.7	2.8E-66	Protein coding	signaling receptor binding and C5L2 anaphylatoxin chemotactic receptor binding
	7	STON1	-2.4	5.5E-65	Protein coding	Unk.
	8	KCNH2	-2.1	6.3E-60	Protein coding	protein homodimerization activity and obsolete signal transducer activity
	9	HRC	-3.3	6.4E-60	Protein coding	calcium ion binding and ATPase binding
	10	KLF15	-1.7	6.9E-59	Protein coding	DNA-binding transcription factor activity and proximal promoter DNA-binding transcription activator activity, RNA polymerase II-specific