

Appendix 3. Gene expression profiles in the retina after optic nerve irradiated injury

Accession Number	Name	Symbol	Fold Change
GO 0005576	extracellular region		
NM_001032821	chemokine CCL2/MCP-1	MCP-1	8.251426
NM_001032846	interleukin 7	IL7	7.310441
NM_001032851	chemokine (C-C motif) ligand 8	CCL8	3.9127321
NM_001032892	chemokine (C-X-C motif) ligand 10	CXCL10	3.7878022
NM_001032939	Tissue inhibitor of matrix metalloproteinase-1	TIMP-1	3.2303329
XM_001094273	hepcidin antimicrobial peptide	HAMP	3.2058258
NM_001047137	beta-2-microglobulin	B2M	2.899601
NM_001032933	Fas	FAS	2.807665
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
GO 0048519	negative regulation of biological process		
NM_001032821	chemokine CCL2/MCP-1	MCP-1	8.251426
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
XM_001097920	ribosomal protein L24	RPL24	2.8311377
NM_001032933	Fas	FAS	2.807665
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
GO 0048518	positive regulation of biological process		
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
NM_001047137	beta-2-microglobulin	B2M	2.899601
NM_001032933	Fas	FAS	2.807665
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
GO 0032991	macromolecular complex		
NM_001048246	major histocompatibility complex, class I, A	MAMU-A	5.672874
NM_001079671	major histocompatibility complex, class I, I	MAMU-I	4.3039813
XR_013691	similar to tubulin alpha 6	LOC710110	3.6089394
XR_011310	similar to ribosomal protein S14	LOC703405	3.3558946
NM_001047137	beta-2-microglobulin	B2M	2.899601
XM_001086750	similar to 60S ribosomal protein L8	LOC693294	2.8753278
XR_010218	similar to HLA class I histocompatibility antigen, A-2 alpha chain precursor	LOC696824	2.8456938
XM_001115633	similar to HLA class I histocompatibility antigen, B-37 alpha chain precursor	LOC720309	2.1348197
NM_001114964	major histocompatibility complex, class I, B	MAMU-B18	2.0537987
GO 0032501	multicellular organismal process		
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
NM_001032939	Tissue inhibitor of matrix metalloproteinase-1	TIMP-1	3.2303329
NM_001032933	Fas	FAS	2.807665
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967

XR_009921	signal transducer and activator of transcription 1	STAT1	1.9938552
GO 0065007	biological regulation		
NM_001032821	chemokine CCL2/MCP-1	MCP-1	8.251426
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
NM_001032939	Tissue inhibitor of matrix metalloproteinase-1	TIMP-1	3.2303329
XM_001094273	hepcidin antimicrobial peptide	HAMP	3.2058258
NM_001047137	beta-2-microglobulin	B2M	2.899601
XM_001097920	ribosomal protein L24	RPL24	2.8311377
NM_001032933	Fas	FAS	2.807665
NM_001047123	interferon induced with helicase C domain 1	IFIH1	2.255133
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
XM_001104048	interferon regulatory factor 1	IRF1	2.1032486
GO 0009987	cellular process		
NM_001032821	chemokine CCL2/MCP-1	MCP-1	8.251426
XR_013691	similar to tubulin alpha 6	LOC710110	3.6089394
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
XR_011310	similar to ribosomal protein S14	LOC703405	3.3558946
NM_001032939	Tissue inhibitor of matrix metalloproteinase-1	TIMP-1	3.2303329
XM_001094273	hepcidin antimicrobial peptide	HAMP	3.2058258
NM_001047137	beta-2-microglobulin	B2M	2.899601
XM_001097920	ribosomal protein L24	RPL24	2.8311377
NM_001032933	Fas	FAS	2.807665
XR_014727	hypothetical protein LOC722251	LOC722251	2.4820948
NM_001047123	interferon induced with helicase C domain 1	IFIH1	2.255133
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
XM_001104048	interferon regulatory factor 1	IRF1	2.1032486
XR_009921	signal transducer and activator of transcription 1	STAT1	1.9938552
GO:0044464	cell part		
NM_001048246	major histocompatibility complex, class I, A	MAMU-A	5.672874
NM_001079693	myxovirus resistance 1	MX1	4.9953976
XM_001102095	glial fibrillary acidic protein	GFAP	4.4226785
NM_001079671	major histocompatibility complex, class I, I	MAMU-I	4.3039813
NM_001032851	chemokine (C-C motif) ligand 8	CCL8	3.9127321
XR_013691	similar to tubulin alpha 6	LOC710110	3.6089394
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
XR_011310	similar to ribosomal protein S14	LOC703405	3.3558946
NM_001047137	beta-2-microglobulin	B2M	2.899601
XM_001086750	similar to 60S ribosomal protein L8	LOC693294	2.8753278
XR_010218	similar to HLA class I histocompatibility antigen, A-2 alpha chain precursor (MHC class I antigen A*	LOC696824	2.8456938
XM_001097920	ribosomal protein L24	RPL24	2.8311377

NM_001032933	Fas	FAS	2.807665
XR_011674	similar to peptidylprolyl isomerase A isoform 1	LOC707078	2.534519
XR_014727	hypothetical protein LOC722251	LOC722251	2.4820948
NM_001047123	interferon induced with helicase C domain 1	IFIH1	2.255133
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
XM_001115633	similar to HLA class I histocompatibility antigen, B-37 alpha chain precursor	LOC720309	2.1348197
NM_001114964	major histocompatibility complex, class I, B	MAMU-B18	2.0537987
XR_009921	signal transducer and activator of transcription 1	STAT1	1.9938552
XM_001114708	claudin 18	CLDN18	-2.165894
GO:0005623	cell		
NM_001048246	major histocompatibility complex, class I, A	MAMU-A	5.672874
NM_001079693	myxovirus resistance 1	MX1	4.9953976
XM_001102095	glial fibrillary acidic protein	GFAP	4.4226785
NM_001079671	major histocompatibility complex, class I, I	MAMU-I	4.3039813
NM_001032851	chemokine (C-C motif) ligand 8	CCL8	3.9127321
XR_013691	similar to tubulin alpha 6	LOC710110	3.6089394
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
XR_011310	similar to ribosomal protein S14	LOC703405	3.3558946
NM_001047137	beta-2-microglobulin	B2M	2.899601
XM_001086750	similar to 60S ribosomal protein L8	LOC693294	2.8753278
XR_010218	similar to HLA class I histocompatibility antigen, A-2 alpha chain precursor	LOC696824	2.8456938
NM_001032933	Fas	FAS	2.807665
XM_001097920	ribosomal protein L24	RPL24	2.8311377
XR_011674	similar to peptidylprolyl isomerase A isoform 1	LOC707078	2.534519
XR_014727	hypothetical protein LOC722251	LOC722251	2.4820948
NM_001047123	interferon induced with helicase C domain 1	IFIH1	2.255133
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
XM_001115633	similar to HLA class I histocompatibility antigen, B-37 alpha chain precursor	LOC720309	2.1348197
NM_001114964	major histocompatibility complex, class I, B	MAMU-B18	2.0537987
XR_009921	signal transducer and activator of transcription 1	STAT1	1.9938552
GO:0005488	binding		
NM_001033115	RFamide-related peptide	RFRP	9.552766
NM_001032821	chemokine CCL2/MCP-1	MCP-1	8.251426
NM_001032846	interleukin 7	IL7	7.310441
NM_001079693	myxovirus resistance 1	MX1	4.9953976
XM_001102095	glial fibrillary acidic protein	GFAP	4.4226785
NM_001032851	chemokine (C-C motif) ligand 8	CCL8	3.9127321
NM_001032892	chemokine (C-X-C motif) ligand 10	CXCL10	3.7878022
XR_013691	similar to tubulin alpha 6	LOC710110	3.6089394

NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
NM_001032939	Tissue inhibitor of matrix metalloproteinase-1	TIMP-1	3.2303329
NM_001047137	beta-2-microglobulin	B2M	2.899601
XM_001097920	ribosomal protein L24	RPL24	2.8311377
NM_001032933	Fas (TNF receptor superfamily, member 6)	FAS	2.807665
XR_011674	similar to peptidylprolyl isomerase A isoform 1	LOC707078	2.534519
XR_014727	hypothetical protein LOC722251	LOC722251	2.4820948
NM_001047123	interferon induced with helicase C domain 1	IFIH1	2.255133
XM_001085753	interferon-induced protein with tetratricopeptide repeats 3	IFIT3	2.204328
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
XM_001104048	interferon regulatory factor 1	IRF1	2.1032486
GO:0050896	response to stimulus		
NM_001032821	chemokine CCL2/MCP-1	MCP-1	8.251426
NM_001032846	interleukin 7	IL7	7.310441
NM_001048246	major histocompatibility complex, class I, A	MAMU-A	5.672874
NM_001079693	myxovirus resistance 1	MX1	4.9953976
NM_001079671	major histocompatibility complex, class I, I	MAMU-I	4.3039813
NM_001032851	chemokine (C-C motif) ligand 8	CCL8	3.9127321
NM_001032892	chemokine (C-X-C motif) ligand 10	CXCL10	3.7878022
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
NM_001047137	beta-2-microglobulin	B2M	2.899601
XM_001086750	similar to 60S ribosomal protein L8	LOC693294	2.8753278
XR_010218	similar to HLA class I histocompatibility antigen, A-2 alpha chain precursor	LOC696824	2.8456938
NM_001032933	Fas (TNF receptor superfamily, member 6)	FAS	2.807665
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
XM_001115633	similar to HLA class I histocompatibility antigen, B-37 alpha chain precursor	LOC720309	2.1348197
NM_001114964	major histocompatibility complex, class I, B	MAMU-B18	2.0537987
GO:0002376	immune system process		
NM_001032821	chemokine CCL2/MCP-1	MCP-1	8.251426
NM_001032846	interleukin 7	IL7	7.310441
NM_001048246	major histocompatibility complex, class I, A	MAMU-A	5.672874
NM_001079671	major histocompatibility complex, class I, I	MAMU-I	4.3039813
NM_001032851	chemokine (C-C motif) ligand 8	CCL8	3.9127321
NM_001032892	chemokine (C-X-C motif) ligand 10	CXCL10	3.7878022
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
NM_001032939	Tissue inhibitor of matrix metalloproteinase-1	TIMP-1	3.2303329
NM_001047137	beta-2-microglobulin	B2M	2.899601
XM_001086750	similar to 60S ribosomal protein L8	LOC693294	2.8753278
XR_010218	similar to HLA class I histocompatibility antigen, A-2 alpha chain precursor	LOC696824	2.8456938
NM_001032933	Fas	FAS	2.807665

XM_001115633	similar to HLA class I histocompatibility antigen, B-37 alpha chain precursor	LOC720309	2.1348197
NM_001114964	major histocompatibility complex, class I, B	MAMU-B18	2.0537987
GO:0032502	developmental process		
NM_001032821	chemokine CCL2/MCP-1	MCP-1	8.251426
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
NM_001032939	Tissue inhibitor of matrix metalloproteinase-1	TIMP-1	3.2303329
NM_001047137	beta-2-microglobulin	B2M	2.899601
XM_001097920	ribosomal protein L24	RPL24	2.8311377
NM_001032933	Fas	FAS	2.807665
NM_001047123	interferon induced with helicase C domain 1	IFIH1	2.255133
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
XR_009921	signal transducer and activator of transcription 1	STAT1	1.9938552
GO:0050789	regulation of biological process		
NM_001032821	chemokine CCL2/MCP-1	MCP-1	8.251426
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
NM_001047137	beta-2-microglobulin	B2M	2.899601
XM_001097920	ribosomal protein L24	RPL24	2.8311377
NM_001032933	Fas	FAS	2.807665
NM_001047123	interferon induced with helicase C domain 1	IFIH1	2.255133
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
XM_001104048	interferon regulatory factor 1	IRF1	2.1032486
GO:0008152	metabolic process		
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
XR_011310	similar to ribosomal protein S14	LOC703405	3.3558946
NM_001032933	Fas	FAS	2.807665
XR_011674	similar to peptidylprolyl isomerase A isoform 1	LOC707078	2.534519
XR_014727	hypothetical protein LOC722251	LOC722251	2.4820948
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
XM_001104048	interferon regulatory factor 1	IRF1	2.1032486
GO:0043226	organelle		
XR_013691	similar to tubulin alpha 6	LOC710110	3.6089394
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
XR_011310	similar to ribosomal protein S14	LOC703405	3.3558946
XM_001097920	ribosomal protein L24	RPL24	2.8311377
XR_014727	hypothetical protein LOC722251	LOC722251	2.4820948
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
XR_009921	signal transducer and activator of transcription 1	STAT1	1.9938552
GO:0016265	death		
NM_001032821	chemokine CCL2/MCP-1	MCP-1	8.251426
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
NM_001047137	beta-2-microglobulin	B2M	2.899601

XM_001097920	ribosomal protein L24	RPL24	2.8311377
NM_001032933	Fas	FAS	2.807665
NM_001047123	interferon induced with helicase C domain 1	IFIH1	2.255133
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
GO:0003824	catalytic activity		
NM_001079693	myxovirus resistance 1	MX1	4.9953976
XR_013691	similar to tubulin alpha 6	LOC710110	3.6089394
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
XR_011310	similar to ribosomal protein S14	LOC703405	3.3558946
XR_011674	similar to peptidylprolyl isomerase A isoform 1	LOC707078	2.534519
NM_001047123	interferon induced with helicase C domain 1	IFIH1	2.255133
XR_013420	similar to Keratin, type I cytoskeletal 16	LOC707236	-2.414444
GO:0044422	organelle part		
XR_013691	similar to tubulin alpha 6	LOC710110	3.6089394
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
XR_014727	hypothetical protein LOC722251	LOC722251	2.4820948
XR_009921	signal transducer and activator of transcription 1	STAT1	1.9938552
GO:0010926	anatomical structure formation		
XR_013691	similar to tubulin alpha 6	LOC710110	3.6089394
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
NM_001032933	Fas	FAS	2.807665
XR_014727	hypothetical protein LOC722251	LOC722251	2.4820948
GO:0044421	extracellular region part		
NM_001032821	chemokine CCL2/MCP-1	MCP-1	8.251426
NM_001032851	chemokine (C-C motif) ligand 8	CCL8	3.9127321
NM_001032892	chemokine (C-X-C motif) ligand 10	CXCL10	3.7878022
NM_001032939	Tissue inhibitor of matrix metalloproteinase-1	TIMP-1	3.2303329
GO:0051179	localization		
NM_001032821	chemokine CCL2/MCP-1	MCP-1	8.251426
XR_013691	similar to tubulin alpha 6	LOC710110	3.6089394
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
GO:0051704	multi-organism process		
NM_001032821	chemokine CCL2/MCP-1	MCP-1	8.251426
NM_001079693	myxovirus resistance 1	MX1	4.9953976
NM_001047137	beta-2-microglobulin	B2M	2.899601
GO:0031975	envelope		
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
XR_014727	hypothetical protein LOC722251	LOC722251	2.4820948
GO:0030234	enzyme regulator activity		
NM_001032939	Tissue inhibitor of matrix metalloproteinase-1	TIMP-1	3.2303329
XR_014727	hypothetical protein LOC722251	LOC722251	2.4820948
GO:0040011	locomotion		
NM_001032821	chemokine CCL2/MCP-1	MCP-1	8.251426

NM_001032892	chemokine (C-X-C motif) ligand 10	CXCL10	3.7878022
GO:0051234	establishment of localization		
XR_013691	similar to tubulin alpha 6	LOC710110	3.6089394
XM_001089568	Brain-derived neurotrophic factor	BDNF	2.1950967
GO:0043473	pigmentation		
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
GO:0001906	cell killing		
NM_001047137	beta-2-microglobulin	B2M	2.899601
GO:0009055	electron carrier activity		
XR_011674	similar to peptidylprolyl isomerase A isoform 1	LOC707078	2.534519
GO:0022414	reproductive process		
XR_009921	signal transducer and activator of transcription 1	STAT1	1.9938552
GO:0000003	reproduction		
XR_009921	signal transducer and activator of transcription 1	STAT1	1.9938552
GO:0005198	structural molecule activity		
XR_013691	similar to tubulin alpha 6	LOC710110	3.6089394
GO:0030528	transcription regulator activity		
XM_001104048	interferon regulatory factor 1	IRF1	2.1032486
GO:0031974	membrane-enclosed lumen		
NM_001032805	Mn-superoxide dismutase	LOC574097	3.3869123
GO:0060089	molecular transducer activity		
NM_001032933	Fas	FAS	2.807665