

Analysis Type by Cancer	Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal														
Bladder Cancer					3					1			1		1		1			1													
Brain and CNS Cancer	1				1	2		1	3		2		1	2	3		1	4	1	10													
Breast Cancer				1	14	1	1			11			2		2	1	1	11	11	8	1	1	18										
Cervical Cancer	4		3		1		1						2	2			2	1	1														
Colorectal Cancer	17	1		1		7	2			1			5	1		8	5	1	4				5										
Esophageal Cancer	3		4			1		3									1				4												
Gastric Cancer	2					3						1						1					1										
Head and Neck Cancer	4		4			1	4			2			5	2		3	4	4	4	5	5		1										
Kidney Cancer				1		4						7			4		3	4	4	1	4		2										
Leukemia	1	3	5		2	1	3	1			2	2	1	2	6	5	7		1	2	12		6										
Liver Cancer	2					1	4		1						1	3		3	2	2	4												
Lung Cancer			4		3		3	4			6			5		4		2				9											
Lymphoma		2			1	9			1		1	1	3		5		13			17	10	15	1										
Melanoma							1						1							2			4										
Myeloma					1						1					1							1										
Other Cancer	3		1										2	1		5	1		3	2	6												
Ovarian Cancer						1				1							1			1			2										
Pancreatic Cancer	3		1			2							1				1				1												
Prostate Cancer									1										1														
Sarcoma						1		1											1			1	3										
Significant Unique Analyses	40	5	1	22	1	7	14	48	13	8	3	1	8	21	6	2	29	7	16	12	35	24	19	2	48	45	59	13	3	11	27	38	
Total Unique Analyses	483		417		414		477		469		395		463		461		420		467		466		439		471		454		476		477		472
	CXCL8	CXCR2	CXCR1	CXCL12	IL1B	CXCR3	IL6	RELA	ICAM1	CCR1	CCL5	CCL20	CXCL9	CXCL10	MMP9	NFKB1	EGFR																

Figure S1. Oncomine-derived gene expression levels (Cancer vs Normal) for CXCL8 related genes selected from STRING and literature

Analysis Type by Cancer	CXCL8		CEBPB		FOS		JUN		DARC	
	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal
Bladder Cancer					4		3		4	
Brain and CNS Cancer	1				1		2			1
Breast Cancer			2		13		19	1	11	
Cervical Cancer	4		1		1		1			
Colorectal Cancer	17		13		1	1	9			10
Esophageal Cancer	3		1		1				2	
Gastric Cancer	2		2							
Head and Neck Cancer	4		3							1
Kidney Cancer			3		1					
Leukemia	1	3	2	8	3	3	4	2		3
Liver Cancer	2				5		1			
Lung Cancer			2		9		4			13
Lymphoma		2	9		4	1	8	3	4	
Melanoma							1	2		2
Myeloma			1							
Other Cancer	3		4		2	2	1	1		3
Ovarian Cancer						4		2		1
Pancreatic Cancer	3		1							1
Prostate Cancer					1					1
Sarcoma			4		6		3			8
Significant Unique Analyses	40	5	40	16	11	50	23	41	7	59
Total Unique Analyses	483		433		465		478		469	

Figure S1 (Continued)

Analysis Type by Cancer	Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal																	
Bladder Cancer				1		3					1							4		1																
Brain and CNS Cancer	1					1			1		4		1	1			8		2	2			7		7		2									
Breast Cancer			8	1	7	1	14		12	1		1	1					3		1			11				16	1								
Cervical Cancer	4		3					1	2	1				2		1		2		1			1	2			2		1							
Colorectal Cancer	17		20		20			7	5			3	5		4		2		20				10			20	2		2							
Esophageal Cancer	3		5					1					1			1		6		3			3	4			4		3							
Gastric Cancer	2		2					3												2				6												
Head and Neck Cancer	4		7	1	2			1												1	3	1			8		4		4							
Kidney Cancer				2		2	4		1				3				1	1		2					4	2	5									
Leukemia	1	3		9	1	1	1	3		2	10			1						2		10			2	2	7	1	9	1						
Liver Cancer	2			1				4					3							2							2			1						
Lung Cancer				1		6		3					2										3	1	1			6		4						
Lymphoma		2						9					4		6												8	2								
Melanoma													3							1								1		1						
Myeloma								1												1																
Other Cancer	3												5	3						1					7		4	1								
Ovarian Cancer						1		1		1										1								1								
Pancreatic Cancer	3				2			2	1		2		2		2					2					2		1									
Prostate Cancer																								1				3								
Sarcoma				1			1		1	1														1		1	1	1	3							
Significant Unique Analyses	40	5	37	23	26	18	14	48	6				43	13	18	6	19	2	9	5			6	5	43	16	20	30	1	25	72	14	30	53	13	8
Total Unique Analyses	483		466		426		477		455				476		301		439		462				388		476		464		394		459		475		469	

CXCL8 CXCL1 CXCL3 CXCL12 FOSL1 PLAUR NCEH1 CCL20 LIF IL1A PHLDA1 UPP1 MAFF TGFBI ANXA1 IL1B

Figure S2. OncoPrint-derived gene expression levels (Cancer vs Normal) for CXCL8 related genes selected from CCLE

Analysis Type by Cancer	Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal	
Bladder Cancer			4				2	
Brain and CNS Cancer	1		1		2		4	
Breast Cancer				1		1	3	
Cervical Cancer	4		2				4	
Colorectal Cancer	17			1		1	11	
Esophageal Cancer	3		3				3	
Gastric Cancer	2						5	
Head and Neck Cancer	4		7		2		10	
Kidney Cancer			2		7			2
Leukemia	1	3	1		2	1	1	1
Liver Cancer	2				2			
Lung Cancer				2		2	5	
Lymphoma		2			12		10	
Melanoma			1			1		
Myeloma								
Other Cancer	3				5	1	6	
Ovarian Cancer			1				1	
Pancreatic Cancer	3		4		3		3	
Prostate Cancer				3		6		
Sarcoma					2	1		
Significant Unique Analyses	40	5	26	7	35	14	68	3
Total Unique Analyses	483		473		450		470	

CXCL8 ITGA3 MYOF PLAU

Figure S2 (Continued)

Analysis Type by Cancer	Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal										
Bladder Cancer					1		1			3	1	1		1		1		2		1									
Brain and CNS Cancer		1								1		1																	
Breast Cancer				8	18	1	7	1	1	14	11	11	5	1	1	2		1	1	3									
Cervical Cancer		4		3	3					1	2	1	2		2		2												
Colorectal Cancer	1	17	1		20	14	1	20	9		7	1	4	11	7		4	4	5	7									
Esophageal Cancer		3		4	5	2				1				2					1										
Gastric Cancer		2			2					3	1																		
Head and Neck Cancer		4		4	7	1	1	2	1	1	4	5	4	2	1		1	4		1									
Kidney Cancer	1				2			2	1	1	4	4	4	1		2	2	1	3										
Leukemia	2	1	3		5		9	5	1	1	1	3	1			1		2	1	3									
Liver Cancer		2			1	5		1		1	4	2	4	3	3		3	2	3	3									
Lung Cancer	3			4	1	10	6	2		3						7	1			2									
Lymphoma	1		2			1	2			9		17	10	7		11	9			6									
Melanoma																	1			1									
Myeloma										1																			
Other Cancer		3		1		1	1				3	2				2	3												
Ovarian Cancer							1			1		1	1		2			1		1									
Pancreatic Cancer		3		1		2		2		2								1											
Prostate Cancer											1				1														
Sarcoma				1	6				1	1			1		1		1	1	1	1									
Significant Unique Analyses	1	7	40	5	1	22	37	23	19	49	26	18	13	5	14	48	48	45	34	15	3	29	7	18	12	19	2	9	18
Total Unique Analyses	414	483	417	466	459	426	411	477	471	454	411	428	432	460	439	431													
	CXCR1	CXCL8	CXCR2	CXCL1	CXCL2	CXCL3	CXCL5	CXCL12	CXCL9	CXCL10	CXCL11	CXCL6	CXCL13	CCL19	CCL20	CCL21													

Figure S3. Oncomine-derived gene expression levels (Cancer vs Normal) for CXCR1 related genes selected from STRING and literature

Analysis Type by Cancer	Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal	
Bladder Cancer						2				3
Brain and CNS Cancer										
Breast Cancer				2						
Cervical Cancer										
Colorectal Cancer	1			2		5				3
Esophageal Cancer								3		
Gastric Cancer										
Head and Neck Cancer						2				
Kidney Cancer		1		2				1		4
Leukemia		2		2	6	8		1		
Liver Cancer										1
Lung Cancer		3			7			1		1
Lymphoma		1					3			1
Melanoma										
Myeloma										
Other Cancer										
Ovarian Cancer										1
Pancreatic Cancer				1		2				
Prostate Cancer										
Sarcoma						1				
Significant Unique Analyses	1	7		5	17	22	6		1	13
Total Unique Analyses	414		391		459		451		371	

CXCR1 CCL27 CXCL7 GNA15 GNA14

Figure S3 (Continued)

Analysis Type by Cancer	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal		
Bladder Cancer																	
Brain and CNS Cancer											1						
Breast Cancer							2				1			1	1		
Cervical Cancer						1											
Colorectal Cancer	1									3		3					
Esophageal Cancer																	
Gastric Cancer																	
Head and Neck Cancer																	
Kidney Cancer	1					1					3						
Leukemia	2																
Liver Cancer										2							
Lung Cancer	3																
Lymphoma	1					1			1				1				
Melanoma																	
Myeloma																	
Other Cancer																	
Ovarian Cancer																	
Pancreatic Cancer							1				2						
Prostate Cancer																	
Sarcoma																	
Significant Unique Analyses	1	7				1	1	2	2	1	5	4	3	3	1	1	1
Total Unique Analyses	414	257	257	257	257	272	408	167	282	241	424	251	265	374	278		
	CXCR1	LRRC43	ASB10	OXER1	DSCR10	POM121L12	AVPR1B	GALR3	SLC34A3	ASPG	EVX1	TMEM105	TSSK3	CNTD2	UTS2R		

Figure S4. OncoPrint-derived gene expression levels (Cancer vs Normal) for CXCR1 related genes selected from CCLE

Analysis Type by Cancer	Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal																	
Bladder Cancer						1				1			3				2		3	1																
Brain and CNS Cancer		1											1	2			1			5		1	1													
Breast Cancer				8		18		2	1	7		1	1	14		1	1																			
Cervical Cancer		3	4	3									1	1								1														
Colorectal Cancer	1		17	20		14	1	2		20		9	7		7			5		3																
Esophageal Cancer		4	3	5		2						2	1		1				3			3														
Gastric Cancer			2	2									3									1														
Head and Neck Cancer		4	4	7	1	1				2		1	1		2					1		1														
Kidney Cancer				2			2		2	1	1			4			3		1		4															
Leukemia	5	1	3	9		5	2	6	1	1			1	3			2	7		1	8	1														
Liver Cancer		2		1		5						3		1	4					1		2														
Lung Cancer	4			1		10		7		6		2		3		6		5		1	1															
Lymphoma			2			1	2						9						2	3	1															
Melanoma																					1	1														
Myeloma													1					1																		
Other Cancer	1	3				1	1							2		2					2															
Ovarian Cancer										1				1						1																
Pancreatic Cancer	1	3					1		2			2							2																	
Prostate Cancer											1																									
Sarcoma				1		6		1					1	1							3															
Significant Unique Analyses	1	22	40	5	37	23	19	49	5	17	26	18	13	5	15	3	14	48	3	13	9	12	2	5	22	6	1	13	12	6		4	1	6	8	11
Total Unique Analyses	417		483		466		459		459		426		411		428		477		388		414		478		451		371		479		377		466		477	
	CXCR2	CXCL8	CXCL1	CXCL2	CXCL7	CXCL3	CXCL5	CXCL6	CXCL12	ARRB1	ARRB2	PPP2CA	GNA15	GNA14	GNAI3	GRK1	GRK6	VASP																		

Figure S5. Oncomine-derived gene expression levels (Cancer vs Normal) for CXCR2 related genes selected from STRING and literature

Analysis Type by Cancer	Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal		Cancer vs. Normal			
Bladder Cancer		1		1	1					2		
Brain and CNS Cancer				1		1				4		
Breast Cancer				1	1		1		1	2		
Cervical Cancer	3											
Colorectal Cancer	1	14						5	1			
Esophageal Cancer	4					2		1				
Gastric Cancer						2				1		
Head and Neck Cancer	4		1					2				
Kidney Cancer		2			1		1	1		1		
Leukemia	5	1	1		1					1		
Liver Cancer												
Lung Cancer	4			1		2		3		1		
Lymphoma		2					2	1				
Melanoma			1		2			1				
Myeloma			1									
Other Cancer	1							1		1		
Ovarian Cancer				3						1		
Pancreatic Cancer	1											
Prostate Cancer							2					
Sarcoma				1				1	1			
Significant Unique Analyses	1	22	20	4	8	6	7	6	16	3	14	
Total Unique Analyses	417		405		479		445		313		443	

CXCR2 GTF3A ST13 RGS12 MYO5B RAB11FIP2

Figure S5 (Continued)

Analysis Type by Cancer	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal	Cancer vs. Normal															
Bladder Cancer						1						3							2														
Brain and CNS Cancer		1			1	3	1		1								3	3															
Breast Cancer		2			1	1	2	3				2		1	1	5	6		4														
Cervical Cancer							1																										
Colorectal Cancer	1								2	1			2		7	1	1	1	1	3	3												
Esophageal Cancer										1																							
Gastric Cancer							1										1			1													
Head and Neck Cancer										1					1						1												
Kidney Cancer															1					1													
Leukemia		5	1	6	1	11	5	1	3	6					11	1	8	6	6	5	1	12											
Liver Cancer															1					1													
Lung Cancer																																	
Lymphoma																																	
Melanoma																																	
Myeloma																																	
Other Cancer																																	
Ovarian Cancer																																	
Pancreatic Cancer																																	
Prostate Cancer																																	
Sarcoma																																	
Significant Unique Analyses	1	22	10	7	1	11	6	7	17	4	12	7	24	8	11	1	8	10	2	15	36	1	12	15	22	2	2	41	17	19	7	2	19
Total Unique Analyses	417	436	457	258	454	412	470	277	422	270	417	468	284	473	237	454	378	373															

CXCR2 RNASE2 AZU1 ECRP LILRA2 RNASE3 CSF3R CD300LFPRTN3 PRAM1 ELANE CTSG CLEC12A MNDA SIRPB2 TYROBP CLEC5A ATP8B4

Figure S6. Oncomine-derived gene expression levels (Cancer vs Normal) for CXCR2 related genes selected from CCLE

Table S1. Top 20 cell lines with negative shRNA score for CXCL8

Cell line	shRNA score
LN235_CENTRAL_NERVOUS_SYSTEM	-1.73
QGP1_PANCREAS	-1.36
SKCO1_LARGE_INTESTINE	-1.20
AGS_STOMACH	-1.10
SNU840_OVARY	-1.09
JHOM1_OVARY	-1.05
CADOES1_BONE	-1.00
C32_SKIN	-1.00
LN443_CENTRAL_NERVOUS_SYSTEM	-0.97
ZR7530_BREAST	-0.94
RS411_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	-0.93
HT55_LARGE_INTESTINE	-0.91
HPAC_PANCREAS	-0.87
CAS1_CENTRAL_NERVOUS_SYSTEM	-0.86
OPM2_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	-0.85
HS683_CENTRAL_NERVOUS_SYSTEM	-0.83
NCIH2122_LUNG	-0.83
HCC364_LUNG	-0.81
RMUGS_OVARY	-0.81
HCC1954_BREAST	-0.80

Table S2. Top 20 cell lines with positive shRNA score for CXCL8

Cell line	shRNA score
COLO741_SKIN	0.78
MONOMAC6_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	0.61
ACHN_KIDNEY	0.52
SU8686_PANCREAS	0.47
U87MG_CENTRAL_NERVOUS_SYSTEM	0.38
PLB985_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	0.34
NIHOVCAR3_OVARY	0.33
TE9_OESOPHAGUS	0.32
HEC1A_ENDOMETRIUM	0.28
HL60_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	0.27
SLR20_KIDNEY	0.27
JHOC5_OVARY	0.26
CORL23_LUNG	0.26
KM12_LARGE_INTESTINE	0.25
KNS60_CENTRAL_NERVOUS_SYSTEM	0.22
NCIH1792_LUNG	0.22
C2BBE1_LARGE_INTESTINE	0.21
KASUMI1_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	0.20
NCIH660_PROSTATE	0.20
HCC827GR5_LUNG	0.18

Table S3. Top 20 cell lines with negative shRNA score for CXCR1

Cell line	shRNA score
U87MG_CENTRAL_NERVOUS_SYSTEM	-2.00
NCIH1975_LUNG	-1.91
KMS12BM_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	-1.67
DLD1_LARGE_INTESTINE	-1.59
NCIH716_LARGE_INTESTINE	-1.57
TC71_BONE	-1.56
CH157MN_CENTRAL_NERVOUS_SYSTEM	-1.56
U343_CENTRAL_NERVOUS_SYSTEM	-1.54
AM38_CENTRAL_NERVOUS_SYSTEM	-1.50
UOK101_KIDNEY	-1.46
KYSE150_OESOPHAGUS	-1.42
SNUC2A_LARGE_INTESTINE	-1.42
CAS1_CENTRAL_NERVOUS_SYSTEM	-1.39
CADOES1_BONE	-1.36
COV504_OVARY	-1.35
U178_CENTRAL_NERVOUS_SYSTEM	-1.34
HPAC_PANCREAS	-1.34
JHOC5_OVARY	-1.33
NCIH196_LUNG	-1.31
DKMG_CENTRAL_NERVOUS_SYSTEM	-1.31

Table S4. Cell lines with positive shRNA score for CXCR1. There are only eight cell lines with positive shRNA score for CXCR1

Cell line	shRNA score
EFO21_OVARY	0.23
SNUC1_LARGE_INTESTINE	0.16
KURAMOCHI_OVARY	0.12
HT55_LARGE_INTESTINE	0.07
HT29_LARGE_INTESTINE	0.06
PANC0327_PANCREAS	0.05
QGP1_PANCREAS	0.03
COV362_OVARY	0.02

Table S5. Top 20 cell lines with negative shRNA score for CXCR2. There are no cell lines with positive shRNA score of CXCR2

Cell line	shRNA score
COV434_OVARY	-2.35
SLR21_KIDNEY	-2.30
C32_SKIN	-2.18
SKMEL5_SKIN	-2.14
HCC364_LUNG	-2.12
RKO_LARGE_INTESTINE	-2.05
DBTRG05MG_CENTRAL_NERVOUS_SYSTEM	-2.04
TYKNU_OVARY	-1.98
OAW42_OVARY	-1.96
MKN7_STOMACH	-1.95
CFPAC1_PANCREAS	-1.94
HNT34_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	-1.93
COLO741_SKIN	-1.93
NCIH1975_LUNG	-1.89
HS944T_SKIN	-1.86
LS411N_LARGE_INTESTINE	-1.85
NB4_HAEMATOPOIETIC_AND_LYMPHOID_TISSUE	-1.85
PANC0813_PANCREAS	-1.82
SKRC20_KIDNEY	-1.80
MIAPACA2_PANCREAS	-1.78