

Supplemental Table 1: Proteins identified in triplicate by densitometric analysis of RayBio® protein array of lung-conditioned media versus basal media

RayBiotech Name	Mean Densitometry Values		Ensembl ID	Gene Symbol	Gene Name	Location	Type(s)
	Mito+	Lung					
Neg	1	1					
6Ckine	270	2845	ENSMUSG00000071003	CCL21	chemokine (C-C motif) ligand 21		
BLC	1	4530	ENSMUSG00000023078	CXCL13	chemokine (C-X-C motif) ligand 13		
Cardiotrophin-1	1	4418	ENSMUSG00000042340	CTF1	cardiotrophin 1		
CCL1 / I-309 / TCA-3	1	7517	ENSMUSG00000020702	CCL1	chemokine (C-C motif) ligand 1		
CD30 L	59	1323	ENSMUSG00000028362	TNFSF8	tumour necrosis factor (ligand) superfamily, member 8		
CD40 Ligand / TNFSF5	1	2660	ENSMUSG00000031132	CD40LG	CD40 ligand		
CRG-2	1	4300	ENSMUSG00000034855	CXCL10	chemokine (C-X-C motif) ligand 10	Extracellular Space	cytokine
CTACK	1	74435	ENSMUSG00000066202	CCL27	chemokine (C-C motif) ligand 27		
Eotaxin	1	2886	ENSMUSG00000020676	CCL11	chemokine (C-C motif) ligand 11		
Eotaxin-2	1	2830	ENSMUSG00000004814	CCL24	chemokine (C-C motif) ligand 24		
Erythropoietin (EPO)	1	1579	ENSMUSG00000029711	EPO	erythropoietin		
IL-24	1	3575	ENSMUSG00000026420	IL24	interleukin 24		
IL-27	1	3853	ENSMUSG00000044701	IL27	interleukin 27		
Osteopontin	142	10183	ENSMUSG00000029304	SPP1	secreted phosphoprotein 1		
RANTES	81	10361	ENSMUSG00000035042	CCL5	chemokine (C-C motif) ligand 5		

TWEAK / TNFSF12	1	1048	ENSMUSG00000090170	TNFSF12	tumour necrosis factor (ligand) superfamily, member 12	Extracellular Space	cytokine
CCR9	211	2744	ENSMUSG00000029530	CCR9	chemokine (C-C motif) receptor 9	Plasma Membrane	G-protein coupled receptor
b FGF	245	1267	ENSMUSG00000037225	FGF2	fibroblast growth factor 2 (basic)		
BTC (Betacellulin)	1	4510	ENSMUSG00000082361	BTC	betacellulin		
Cripto	1	4162	ENSMUSG00000032494	TDGF1	teratocarcinoma-derived growth factor 1		
EG-VEGF / PK1	1	2891	ENSMUSG00000070368	PROK1	prokineticin 1		
Endocan	1	3704	ENSMUSG00000042379	ESM1	endothelial cell-specific molecule 1	Extracellular Space	growth factor
Epigen	1	3443	ENSMUSG00000035020	EPGN	epithelial mitogen homolog (mouse)		
Epiregulin	1	4224	ENSMUSG00000029377	EREG	epiregulin		
GDF-8	1	3186	ENSMUSG00000026100	MSTN	myostatin		
VEGF	16	6044	ENSMUSG00000023951	VEGFA	vascular endothelial growth factor A		
Activin A	242	1375	ENSMUSG00000000532	ACVR1B	activin A receptor, type IB	Plasma	
Activin C	183	7449					
Csk	1	6538	ENSMUSG00000032312	CSK	c-src tyrosine kinase	Cytoplasm	kinase
Tie-2	1	8027	ENSMUSG00000006386	TEK	TEK tyrosine kinase, endothelial	Plasma Membrane	
AgRP	1	8330	ENSMUSG00000005705	AGRP	agouti related protein homolog (mouse)	Extracellular Space	
ALCAM	1	4269	ENSMUSG00000022636	ALCAM	activated leukocyte cell adhesion molecule	Plasma Membrane	other
Angiopoietin-like 2	1	4978	ENSMUSG00000004105	ANGPTL2	angiopoietin-like 2	Extracellular Space	

BCMA / TNFRSF17	123	1656	ENSMUSG00000022496	TNFRSF17	tumour necrosis factor receptor superfamily, member 17	Plasma Membrane	
CD11b	185	2927	ENSMUSG00000030786	ITGAM	integrin, alpha M (complement component 3 receptor 3 subunit)	Plasma Membrane	
CRP	120	2854	ENSMUSG00000037942	CRP	C-reactive protein, pentraxin-related	Extracellular Space	
Cerberus 1	1	2730	ENSMUSG00000038192	CER1	cerberus 1, cysteine knot superfamily, homolog (Xenopus laevis)	Extracellular Space	
Chordin-Like 2	1	30340	ENSMUSG00000030732	CHRDL2	chordin-like 2	Extracellular Space	
Crossveinless-2	1	15539	ENSMUSG00000031963	BMPER	BMP binding endothelial regulator	Extracellular Space	
Cryptic Endostatin	1	3533	ENSMUSG00000026124	Cfc1	cripto, FRL-1, cryptic family 1	unknown	other
	1	6658	ENSMUSG00000001435	COL18A1	collagen, type XVIII, alpha 1	Extracellular Space	
IGFBP-3	1	8092	ENSMUSG00000020427	IGFBP3	insulin-like growth factor binding protein 3	Extracellular Space	
IGFBP-5	1	4185	ENSMUSG00000026185	IGFBP5	insulin-like growth factor binding protein 5	Extracellular Space	
IGFBP-6	1	33426	ENSMUSG00000023046	IGFBP6	insulin-like growth factor binding protein 6	Extracellular Space	
IL-17RD	185	2171	ENSMUSG00000040717	IL17RD	interleukin 17 receptor D	Cytoplasm	
L-Selectin	169	10097	ENSMUSG00000026581	SELL	selectin L	Plasma Membrane	
P-Selectin	1	9704	ENSMUSG00000026580	SELP	selectin P (granule membrane protein 140kDa, antigen CD62)	Plasma Membrane	
RELM beta	142	68899	ENSMUSG00000022650	Retnlb	resistin like beta	Extracellular Space	

TFPI	230	4968	ENSMUSG00000027082	TFPI	tissue factor pathway inhibitor (lipoprotein-associated coagulation inhibitor)	Extracellular Space	
TIMP-1	1	19806	ENSMUSG00000001131	TIMP1	TIMP metalloproteinase inhibitor 1	Extracellular Space	
TIMP-2	1	9406	ENSMUSG00000017466	TIMP2	TIMP metalloproteinase inhibitor 2	Extracellular Space	other
Ubiquitin	1	10050		UBB			
VCAM-1	140	21025	ENSMUSG00000027962	VCAM1	vascular cell adhesion molecule 1	Plasma Membrane	
VE-Cadherin	63	4164	ENSMUSG00000031871	CDH5	cadherin 5, type 2 (vascular endothelium)	Plasma Membrane	
Urokinase	192	15501	ENSMUSG00000021822	PLAU	plasminogen activator, urokinase	Extracellular Space	peptidase
beta-Catenin	71	1993	ENSMUSG00000006932	CTNNB1	catenin (cadherin-associated protein), beta 1, 88kDa	Nucleus	transcription regulator
CD30	1	3206	ENSMUSG00000028602	TNFRSF8	tumour necrosis factor receptor superfamily, member 8	Plasma Membrane	
CD40	1	26857	ENSMUSG00000017652	CD40	CD40 molecule, TNF receptor superfamily member 5	Plasma Membrane	
Coagulation Factor III / Tissue Factor	1	48368	ENSMUSG00000028128	F3	coagulation factor III (thromboplastin, tissue factor)	Plasma Membrane	
Common gamma Chain / IL-2 R gamma	1	18445	ENSMUSG00000031304	IL2RG	interleukin 2 receptor, gamma	Plasma Membrane	transmembrane receptor
CTLA-4 / CD152	1	4475		CTLA4	cytotoxic T-lymphocyte-associated protein-4	Membrane and soluble	
Endoglin / CD105	1	8112	ENSMUSG00000026814	ENG	endoglin	Plasma Membrane	
E-Selectin	1	2866	ENSMUSG00000026582	SELE	selectin E	Plasma Membrane	
GFR alpha-2 / GDNF R alpha-2	1	40771	ENSMUSG00000022103	GFRA2	GDNF family receptor alpha 2	Plasma Membrane	

GFR alpha-3 / GDNF R alpha- 3	1	4721	ENSMUSG00000024366	GFRA3	GDNF family receptor alpha 3	Plasma Membrane	
GFR alpha-4 / GDNF R alpha- 4	1	42538	ENSMUSG00000027316	GFRA4	GDNF family receptor alpha 4	Plasma Membrane	
HVEM / TNFRSF14	287	16161	ENSMUSG00000042333	TNFRSF14	tumour necrosis factor receptor superfamily, member 14	Plasma Membrane	transmembrane receptor
ICAM-1	244	2259	ENSMUSG00000037405	ICAM1	intercellular adhesion molecule 1	Plasma Membrane	
TSLPR	1	9584	ENSMUSG00000033467	CRLF2	cytokine receptor-like factor 2	Plasma Membrane	
TWEAK R / TNFRSF12	1	2225		TNFRSF12A	tumour necrosis factor receptor superfamily, member 12A	Plasma Membrane	

Supplemental Table 2. Proteins of interest identified by Ingenuity Pathway Analysis of protein array data

Function Queried	Factors Identified
Metastasis	ANGPTL2, COL18A1, F3, FGF2, FLT1, ICAM1, IGFBP5, IL2RG, PLAU, SELE, SPP1, TEK, TFPI, TIMP1, VCAM1, VEGFA
Migration	ALCAM, CCL1, CCL11, CCL24, CCL5, CCR9, CD40LG, CDH5, CER1, COL18A1, CRP, CSK, CTNNB1, CXCL10, CXCL13, ENG, EPO, EREG, F3, FGF2, FLT1, GFRA3, ICAM1, IGFBP3, IGFBP5, IGFBP6, IL24, IL27RA, ITGAM, PLAU, PROK1, SELE, SELL, SELP, SPP1, TDGF1, TEK, TFPI, TIMP1, TIMP2, TNFRSF14, TNFRSF8, TNFSF12, VCAM1, VEGFA
Neoplastic Growth	ALCAM, ANGPTL2, CCL11, CCL5, CCR9, CD40LG, CDH5, CER1, CHRDL2, COL18A1, CRP, CTNNB1, CXCL10, CXCL13, ENG, EPO, EREG, F3, FGF2, FLT1, ICAM1, IGFBP3, IGFBP5, IGFBP6, IL24, IL27RA, IL2RG, PLAU, SELE, SELL, SPP1, TDGF1, TEK, TFPI, TIMP1, TIMP2, TNFRSF14, TNFRSF8, TNFSF12, TNFSF8, VCAM1, VEGFA
Adhesion	ALCAM, CCL1, CCL11, CCL5, CD40LG, CDH5, COL18A1, CRP, CSK, CTNNB1, CXCL10, CXCL13, ENG, EPO, F3, FGF2, FLT1, ICAM1, IGFBP3, ITGAM, PLAU, SELE, SELL, SELP, SPP1, TDGF1, TEK, TFPI, TIMP1, TIMP2, TNFRSF17, TNFRSF8, VCAM1, VEGFA

(n=3; lung-conditioned media versus basal media)