

## Supplementary Tables

### Supplementary Table S1. Overview of nomenclature.

Complete list of sample IDs along with their tissues of origin, and the mouse strain from which the normal tissues were derived and in which the metastases were grown.

ID	Tissue	Mouse strain	Type
BrSN1	Brain	NOD-SCID	Normal
BrSM1	Brain	NOD-SCID	Metastasis
BrSM2	Brain	NOD-SCID	Metastasis
BrSM3	Brain	NOD-SCID	Metastasis
LuSN1	Lung	NOD-SCID	Normal
LuSM1	Lung	NOD-SCID	Metastasis
LuSM2	Lung	NOD-SCID	Metastasis
LuSM3	Lung	NOD-SCID	Metastasis
LiGN1	Liver	NOD-SCID-gamma	Normal
LiGM1	Liver	NOD-SCID-gamma	Metastasis
LiGM2	Liver	NOD-SCID-gamma	Metastasis
LiGM3	Liver	NOD-SCID-gamma	Metastasis
BoSN1	Bone marrow	NOD-SCID	Normal
BoSM1	Bone marrow	NOD-SCID	Metastasis
BoSM2	Bone marrow	NOD-SCID	Metastasis
BoGN1	Bone marrow	NOD-SCID-gamma	Normal
BoGM1	Bone marrow	NOD-SCID-gamma	Metastasis
BoGM2	Bone marrow	NOD-SCID-gamma	Metastasis

**Supplementary Table S2. Overview of tandem mass tag (TMT) assignment.**

Assignment of sample IDs per 10-plex TMT series, as well as which of the TMT labels was used for each sample. The tenth TMT label (131) was used for a common reference pool, containing equal parts of all samples, run in both TMT plexes.

TMT plex	TMT label	ID
A	129C	BrSN1
A	128N	LuSN1
A	130N	LiGN1
A	130C	BoSN1
A	129N	BoGN1
A	128C	BrSM3
A	127N	LuSM2
A	126	LiGM3
A	127C	BoSM2
B	128N	BrSM1
B	129C	BrSM2
B	128C	LuSM1
B	129N	LuSM3
B	130N	LiGM1
B	130C	LiGM2
B	126	BoSM1
B	127N	BoGM1
B	127C	BoGM2

**Supplementary Table S3. shRNA sequences.**

List of all shRNA 97mers used for gene knockdown. Targeting nucleotides are bolded and underlined.

Target Gene	Sequence (97mer)
Firefly luciferase (Control)	TGCTGTTGACAGTGAGCG <u><b>AGCTCCCGTGAATTGGAATCCT</b></u> AGTGAAGCC ACAGATGT <u><b>AGGATTCCAATTCAGCGGGAGCCTGCCTACTGCCTCGGA</b></u>
AGRN	TGCTGTTGACAGTGAGCG <u><b>CCACCAGGATCTTCTTTGTGAAT</b></u> AGTGAAGC CACAGATGT <u><b>ATTCACAAAGAAGATCCTGGTGTGCCTACTGCCTCGGA</b></u>
ANXA2	TGCTGTTGACAGTGAGCG <u><b>CCAGAGTCTACAAGGAAATGTA</b></u> AGTGAAGC CACAGATGT <u><b>ATACATTTCTTGTAGACTCTGTTGCCTACTGCCTCGGA</b></u>
FREM1	TGCTGTTGACAGTGAGCG <u><b>ACCCTTTAAATGTGAAATCTAA</b></u> AGTGAAGC CACAGATGT <u><b>ATTAGATTTACATTTAAAGGGCTGCCTACTGCCTCGGA</b></u>
HCFC1	TGCTGTTGACAGTGAGCG <u><b>AACCGTTCACTATTGTAGAGTATA</b></u> AGTGAAGC CACAGATGT <u><b>ATACTCTACAATAGTGAACGGTGTGCCTACTGCCTCGGA</b></u>
HMCN1	TGCTGTTGACAGTGAGCG <u><b>AACTCAGGCTGTCAAATTAAT</b></u> AGTGAAGC CACAGATGT <u><b>AATTTAATTTGACAGCCTGAGTCTGCCTACTGCCTCGGA</b></u>
LGALS3	TGCTGTTGACAGTGAGCG <u><b>ACCTCGCATGCTGATAACAATTT</b></u> AGTGAAGC CACAGATGT <u><b>AAATTGTTATCAGCATGCGAGGCTGCCTACTGCCTCGGA</b></u>
PLOD3	TGCTGTTGACAGTGAGCG <u><b>ATCGGATCTTTCAGAACCTCA</b></u> AGTGAAGC CACAGATGT <u><b>ATTGAGGTTCTGAAAGATCCGAGTGCCTACTGCCTCGGA</b></u>
VWA9	TGCTGTTGACAGTGAGCG <u><b>CCAGATGTACAGAAGATTTTA</b></u> AGTGAAGC CACAGATGT <u><b>ATTAATCTTCTGTACATCTGTTGCCTACTGCCTCGGA</b></u>

**Supplementary Table S4. sgRNA sequences.**

Gene	Species	sgRNA sequence
Timp1 (Control)	Mouse	CATATTC <del>CCCAA</del> ACTTCCTG
SERPINB1	Human	CAAATTTGGGGATCTTGAC
S100A4 sg1	Human	TAGGGCTTACCCGTTACCCA
S100A4 sg2	Human	GGTGGGCACCCGTGGGTAAC
S100A6	Human	AGCCAGCGCAGCGTCAATGT

**Supplementary Table S5. qPCR primers used.**

List of all primer pairs used for qPCR. All primers shown are designed to recognize human sequences.

Gene	Direction	Sequence (5' to 3')
ACTIN	Forward	ACCTTCTACAATGAGCTGCG
ACTIN	Reverse	CCTGGATAGCAACGTACATGG
AGRN	Forward	CTCAACTCCAGCCTCATGC
AGRN	Reverse	GAAGCCGCACAGCATTC
ANXA2	Forward	AGAGTTTCCCGCTTGGTTGA
ANXA2	Reverse	TGTTCAAAGCATCCCGCTCA
CSPG4	Forward	GAGCCCAGGCACGAAAAATG
CSPG4	Reverse	GTATGTTTGGCCCCTCCGAA
FREM1	Forward	TGCCTTGCCTCTCTTTACCAG
FREM1	Reverse	AGGTGTATCAGGGTCGGTCA
HCFC1	Forward	CCTGGCTCCATCCAACACAT
HCFC1	Reverse	TCGATGCCATTGGCCACTTC
HMCN1	Forward	GCTGATGGTAGTCTGTATGTGG
HMCN1	Reverse	TCCTCGTTGATCTCCAAACAC
LGALS3	Forward	TGGGGAAGGGAAGAAAGACA
LGALS3	Reverse	TGAGCATCATTCACTGCAACC
PLOD3	Forward	CTGGGCCTGGGAGAGGAGTG
PLOD3	Reverse	TCACGTCGTAGCTATCCACAAACAT
S100A4	Forward	TCTTGGTTTGATCCTGACTGCT
S100A4	Reverse	TCACCCTCTTTGCCCGAGTA
S100A6	Forward	TAAACCGCGAATGTGCGTTG
S100A6	Reverse	GACTGGCCTTATAGCGGTCG
SERPINB1	Forward	ACTTAGGCGACCTCGGGA
SERPINB1	Reverse	TGCTCCATGGTGAAAACCGA
VWA9	Forward	ATGGGCACGGGCATTTCTTC
VWA9	Reverse	CAGGTCGGGTCATGGAAAGG