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**Supplemental information**

**A hierarchical and collaborative**

**BRD4/CEBPD partnership governs**

**vascular smooth muscle cell inflammation**

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## Supplemental Tables

**Table S1.** Materials

<b>Product</b>	<b>Manufacturer</b>	<b>Catalog Number</b>
Protein A/G Magnetic Beads	Thermo Fisher	88802
RNAi Max	Invitrogen	13778150
Protease inhibitor cocktail	Thermo Fisher	87785
jetPRIME transfection reagent	VWR	114-07
PageRuler™ Plus Prestained Protein Ladder	Thermo Fisher	26620
Clarity Western ECL Substrate	Bio-rad	170-5060
QIAGEN Plasmid MIDI Kit	QIAGEN	12143
PureLink™ Quick Plasmid Miniprep Kit	Invitrogen	K210011
Pierce™ Anti-HA Magnetic Beads	Thermo/MBSC	88836
PageRuler™ Plus Prestained Protein Ladder	Thermo/MBSC	26619
TRIzol™ Reagent	Life technologies	15596018
cDNA Reverse Transcription Kit	Thermo Fisher	4368814
Subcloning Efficiency DH5α Competent Cells	Thermo Fisher	18265017

DL-Dithiothreitol	Sigma/MBSC	D0632-25G
Ampicillin sodium salt	Sigma/MBSC	a9518-5g
SYBR SAFE DNA GEL STAIN	Thermo/MBSC	S33102
Restore WB Stripping buffer	VWR	PI21059
Perfecta SYBR Green FastMix Low Rox	VWR	101414-286
Halt™ Protease Inhibitor Cocktail	Thermo Fisher	87785
Rat PDGF-BB Recombinant Protein	Thermo Fisher	520BB050
Puromycin Dihydrochloride	Gibco/MBSC	A1113803
Hematoxyline	Sigma	MHS16-500ml
Formaldehyde solution 37% stabilized	VWR	JT2106-4
Salmon Sperm DNA, Sonicated	VWR	10639-332
Proteinase K, Biotechnology Grade	VWR	97062-238
GLYCOGEN SOLUTION, 20 MG/ML	VWR	97063-256
Lithium chloride, anhydrous ≥99.995%	VWR	BT138730-5G
10XTris/Glysin buffer	Bio-Rad	161-0771
10XTris/Glysin/SDS buffer	Bio-Rad	161-0772
Pierce RIPA BUFFER	Thermo Fisher	89901

Olinone	Sigma	SML1303-5MG
RVX208	Apexbio	B1499
Trichostatin A	Sigma	T8552
(+)-JQ1	Apexbio	A1910
Antibody diluent reagent solution	life technologies	003218

**Table S2. siRNA, shRNA, and sgRNA sequences for mouse and rat genes**

Scrambled siRNA	ThermoFisher Assay ID#s63864, sequence information kept by the company
Mouse CEBPD siRNA	UUAGUAGAAAGGCACAUAGCT
Scrambled shRNA	CCGGTAGCGACTAAACACATCAATCCTCGAGGATTGATGTGTTTAGTC GCTATTTTTG
	AATTCAAAAATAGCGACTAAACACATCAATCCTCGAGGATTGATGTGTT TAGTCGCTA
Mouse BRD2 shRNA#1	CCGGCAGCCCAAGAAATCTAAGAACTCGAGTTTCTTAGATTTCTTGGG CTGTTTTTG
	AATTCAAAAACAGCCCAAGAAATCTAAGAACTCGAGTTTCTTAGATTT CTTGGGCTG
Mouse BRD2 shRNA#2	CCGGCCTCAGAATGTATGCAGGATTCTCGAGAATCCTGCATACATTCT GAGGTTTTTG
	AATTCAAAAACCTCAGAATGTATGCAGGATTCTCGAGAATCCTGCATAC ATTCTGAGG
Mouse BRD3 shRNA#1	CCGGAGCTGAACCTGCCTGATTATCCTCGAGGATAATCAGGCAGGTTC AGCTTTTTTG
	AATTCAAAAAAGCTGAACCTGCCTGATTATCCTCGAGGATAATCAGGCA GGTTCAGCT
Mouse BRD3 shRNA#2	CCGGCCACAGATGATATAGTGCTAACTCGAGTTAGCACTATATCATCTG TGTTTTTG
	AATTCAAAAACCACAGATGATATAGTGCTAACTCGAGTTAGCACTATAT CATCTGTGG
Mouse BRD4 shRNA#1	CCGGGCCATCTACACTACGAGAGTTCTCGAGAACTCTCGTAGTGTAGA TGGCTTTTTG

	AATTCAAAAAGCCATCTACACTACGAGAGTTCTCGAGAACTCTCGTAGT GTAGATGGC
Mouse BRD4 shRNA#2	CCGGGATGTGTTTCAAATGCGCTTTCTCGAGAAAGCGCATTTC AAACA CATCTTTTGG
	AATTCAAAAAGATGTGTTTCAAATGCGCTTTCTCGAGAAAGCGCATTTC AAACACATC
sgRNAs for enhancer deletion	GGAGAAACGCACCGCGGTTAGGG
	CTCTCGTCGTCGTACATGGCAGG

**Table S3. Antibodies**

Antigen	Manufacturer	Catalog Number	Dilution Ratio	Application
BRD2	Proteintech	22236-1-AP	1:1000	Western Blot
BRD3	Proteintech	11859-1-AP	1:1000	Western Blot
BRD4	Abcam	ab128874	1:1000	Western Blot
$\beta$ -actin	Proteintech	66009-1-Ig	1:5000	Western Blot
HA	Proteintech	51064-2-AP	1:5000	Western Blot
Flag	Sigma	F3165-2MG	1:5000	Western Blot
CEBPD	Abcam	ab198230	1:100	IF
CEBPD	Santa cruz	Sc-515028	1:100	Western Blot
PDGFR $\alpha$	CST	3164S	1:1000	Western Blot
PDGFR $\beta$	CST	4564	1:1000	Western Blot

Goat anti-mouse (H+L) HRP-conjugated IgG	Bio-Rad	170-6516	1:3000	Western Blot
Goat anti-rabbit (H+L) HRP-conjugated IgG	Bio-Rad	170-6516	1:3000	Western Blot

**Table S4. Primer sequences for mouse genes**

Mouse GAPDH	Forward: AAGGTCGGTGTGAACGGATT
	Reverse: CTTTGTCAACAAGAGAAGGCAGC
Mouse BRD2	Forward: AATGGCTTCTGTACCAGCTTTAC
	Reverse: CTGGCTTTTTGGGATTGGACA
Mouse BRD3	Forward: AAAAAGGCTCCCACCAAGAAG
	Reverse: TGTC AAGGCTAAGTTGTCGCT
Mouse BRD4	Forward: AGTGTCTTTGACCCTATTAGCCA
	Reverse: CATGCTGGTTGAGATGGGG
Mouse CEBPD	Forward: CGACTTCAGCGCCTACATTGA
	Reverse: CTAGCGACAGACCCACAC
Mouse PDGFR $\alpha$	Forward: TCCATGCTAGACTCAGAAGTCA
	Reverse: TCCCGGTGGACACAATTTTTTC
Mouse IL1-beta	Forward: GCAACTGTTCTGAACTCAACT
	Reverse: ATCTTTTGGGGTCCGTCAACT
Mouse IL-6	Forward: CTGCAAGAGACTTCCATCCAG
	Reverse: AGTGGTATAGACAGGTCTGTTGG
mouse MCP-1	Forward: TTAAAAACCTGGATCGGAACCAA
	Reverse: GCATTAGCTTCAGATTTACGGGT
Mouse PDGFR $\beta$	Forward: CAAGAAGCGGCCATGAATCAG
	Reverse: CGGCCCTAGTGAGTTGTTGT
Mouse PDGFR $\beta$ promoter	Forward: CCCACCCCGGCCTTTTATA
	Reverse: AGGGCGGCAATTTGTCTCC
Mouse PDGFR $\alpha$ promoter	Forward: CTTGGCCTGTTGCTGTCTTAG
	Reverse: ACTCTGTTCTCGCTGCTCGTA
Mouse CEBPD enhancer	Forward: TAGTTCTGGTCTCGTGGCGG
	Reverse: TTCCTGTTTGTGCGGTTTGG
Mouse CEBPD promoter	Forward: TGTTCCGCCTTTGCTATGT
	Reverse: CCTTCCCTCCTTCTGTTT
Human CEBPD promoter	Forward: TCCGTAGACCTGGAAGAAAC
	Reverse: CAAAAGCAGAGCAGATGGG