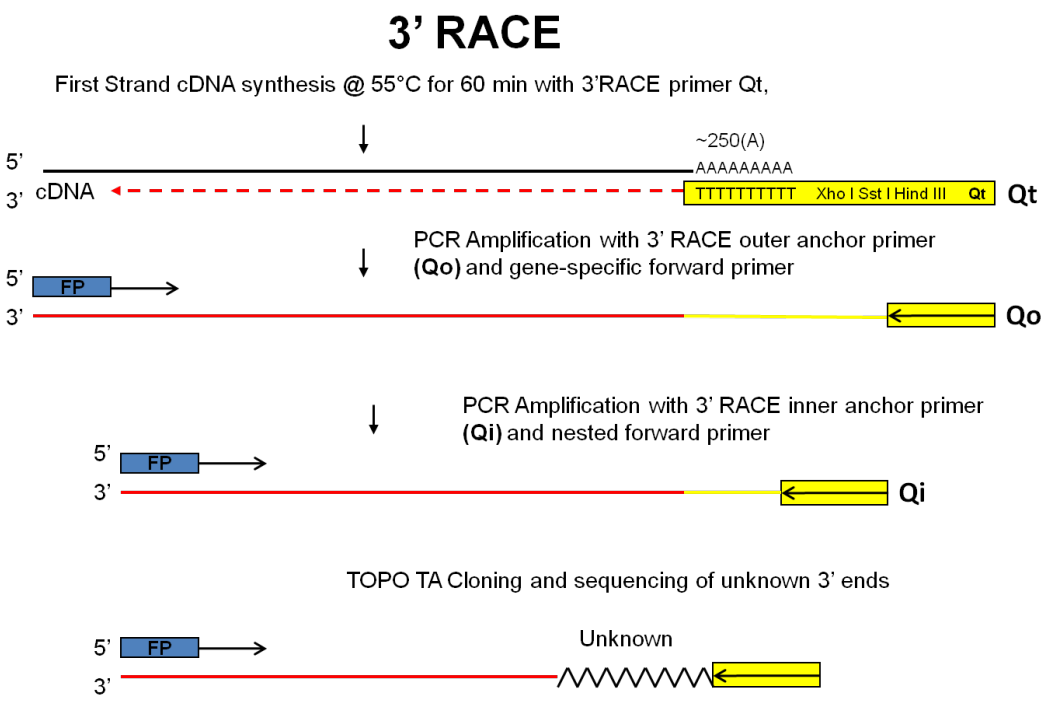
Supplemental Figure 1



Supplemental Figure 1. Schematic of 3' RACE. cDNA synthesis was carried out with a specialized **Qt** primer, that contains a poly(dT) stretch for poly(A) binding which is preceded by restriction enzyme sites and a unique adapter sequence. An 'outer' race (**Qo)** primer was used in the first round of PCR amplification and a gene-specific forward primer. A second round of PCR is required to increase specificity, with a nested forward primer and the (**Qi)** 'inner' anchor primer. The many registers in which the **Qt** primer can bind the poly(A) give rise to a heterogenous population of PCR products, which requires cloning of a singular PCR product before sequencing.

Supplemental Figure 2

Genomic sequence for the PRTN3 gene

PR3 promotor region

Exon 1 (red)
PR3 FP underlined

Intron I
PRTN3-002
FP underlined
(green)

Exon 2
PR3 RP underlined

Intron II
(spliced out)

Exon 3
PRTN3-002
RP (green)

Supplemental Figure 2, Continued

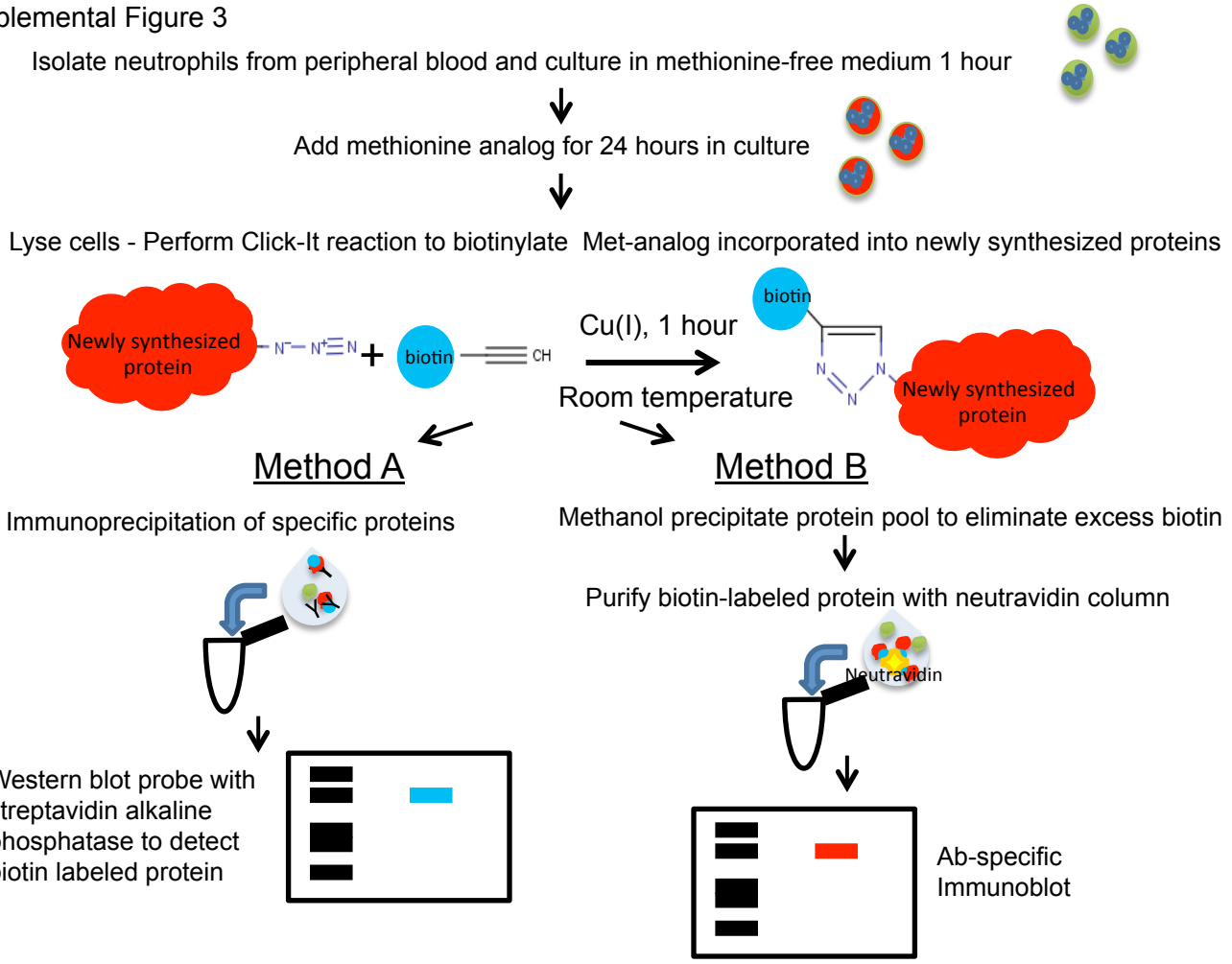
A detailed description of the RT-PCR Protocol used to detect PR3 mRNA versus PRTN3-002 mRNA.

1) *PR3* forward primer sequence resides in exon 1 (5'-CCC ACC ATG GCT CAC-3') and reverse primer in exon 2 (5'-CAA GGT GCC TCC GCA GAA-3') producing a 188 nt amplicon.
2) *PRTN3-002* forward primer sequence resides in intron 1 (5'-GTTGCAGATCGGGAGACG-3') and reverse primer in exon 3 (5'-GTTCTCCGCGTCGTAGTTGT-3') producing a 298 nt amplicon.
3) Full length transcript amplification for *PR3* FP(5'- GACCCACCATGGCTCAC-3') and PRTN3-2 (5'-GTTGCAGATCGGGAGACG-3'). The same reverse primer was used for both 5'-GGAGTTTCAACGTTTATTGAGGTCAC-3'.
4) Primer sequences for cyclophilin were - forward primer 5'- AGG CAG GAA AAG CAA GGA GCCA-3' and reverse primer RP 5'- TCACTGCAGGTAGTCTGCGCC-3'.

Detailed RT-PCR protocol

The reverse transcription (RT) reaction was performed on 600 ng of mRNA in a 15 µl reaction of 0.75 µl of SS III Reverse Transcriptase, 0.75 µl of 10mM dNTPs, 0.2 µl of random hexamer primer (IDT Tech), 0.75 µl of DTT, 3 µl of 5xFS buffer, 1.5 µl of DMSO, 1.5 µl of Betaine, and 0.5 µl of RNasin Plus RNase inhibitor. Rrandom hexamers, dNTPs, and mRNA were heated (65˚C/ 5 minutes) and cooled immediately (4˚C/ 5 minutes) before addition of the remaining reagents. RT conditions for all templates were 50 minutes at 50.0°C, 5 minutes at 60.0°C, 5 minutes at 65.0°C, 5 minutes at 85.0°C, and 4°C. A 50 µL PCR reaction was performed with 10 µl of 5xGC PCR Buffer, 1 µl of 10 mM dNTPs, 1 µl each of 10 µm forward and reverse primers (IDT Tech), 0.5 µl of Phusion Hot Start DNA polymerase (Finnzymes), 2.5 µl DMSO, 30 µl of nuclease free water, and 4 µl of cDNA from the reverse transcription reaction. Thermal cycler profile was 2 minutes at 98 °C, "touchdown" PCR for 10 cycles (98°C, 20 seconds; 68°C, 30 seconds, decreasing by 1°C per cycle; 72°C, 30 seconds), followed by 25 cycles (98°C, 20 seconds; 58°C, 30 seconds; 72°C, 30 seconds), with a final 5 minute extension at 72°C. Product was analyzed by agarose gel electrophoresis. PCR primer sequences were generated by Primer3 (v. 0.4.0) online tool.

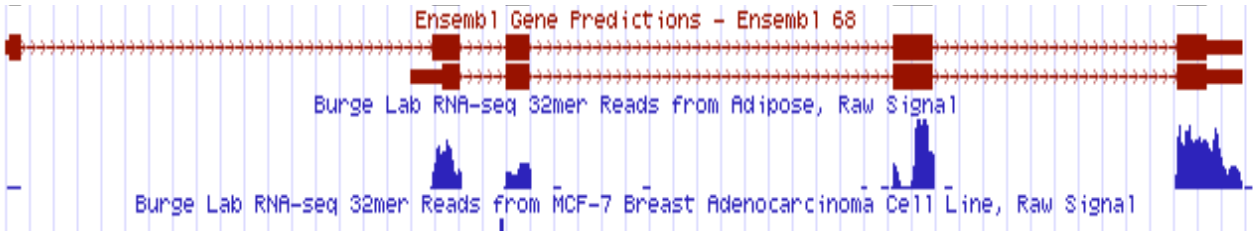
Supplemental Figure 3



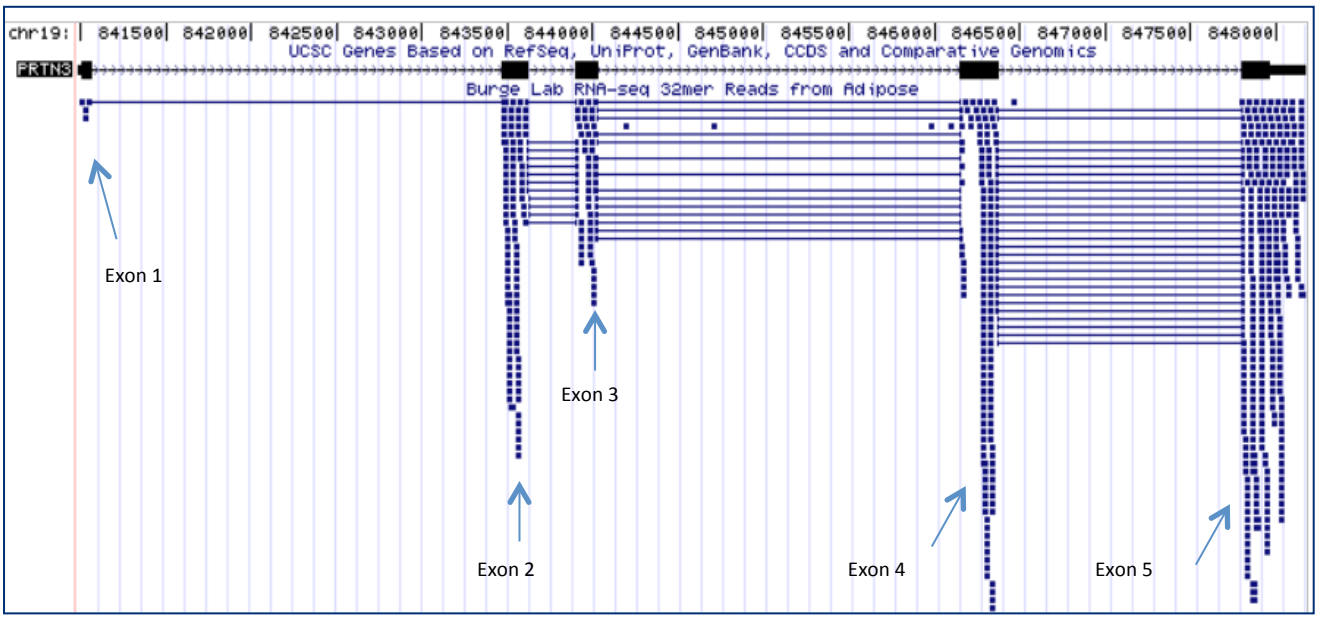
Supplemental Figure 3. Schematic of neutrophil protein synthesis analysis. Leukocytes were isolated from whole blood using HetaSep followed by a Histopaque 1077 gradient to isolate neutrophils. Red blood cells were lysed in hypotonic buffer. Neutrophils were incubated in a 5mL polypropylene tube in a volume of 500ul ($6.6X10^6$ cells/ mL) in methionine free RPMI1640 supplemented with 10% dialyzed FBS 1 hr to deplete methionine pools. Methionine analog L-aziodohomoalanine (Invitrogen) (40uM) was added to medium and neutrophils were incubated 20 hours/37°C, 5% CO_2 under gentle agitation. Cells were lysed in 1% SDS 50mM Tris-HCl lysis buffer supplemented with EDTA Free Protease Inhibitor Cocktail (Roche), incubated on ice for 20 minutes and vortexed for 5 minutes. Lysate was sonicated to fragment DNA, centrifuged and transferred to a clean tube to remove insoluble cellular debris. Cell lysate volume was increased to 1mL using an IP buffer of NaCl, 1M HEPES, EDTA and .1%IPEGAL. Newly synthesized protein, which incorporated the methionine analog with an azide group, was biotinylated through the use of a biotin alkyne (Invitrogen) and the reaction was allowed to proceed at RT while rotating end over end for one hour. Method A: 4ug of anti-PR3 antibody (Santa Cruz H-60) or 4ug of anti-biotin antibody (Abcam, Cambridge, MA) was incubated overnight at 4C. Magnetic Protein A/G beads (40ul) (Pierce, 88802) were added 1 hour followed by 5X washes in IP buffer. Protein was eluted with 0.1% TFA for 45 minutes or 40ul of LDS loading buffer and boiling for 5 minutes respectively. pH was adjusted to 7.0 using 1M Tris HCl. Method B: Excess biotin was removed by a methanol chloroform precipitation or a desalting column. Biotinylated proteins were applied to streptavidin magnetic beads and incubated for 30 minutes at RT under gentle agitation. The beads were applied to a magnetic field and washed 6X in PBS supplemented with 1% BSA and 0.1% Tween 20. Samples were suspended in LDS loading buffer (Sigma) and electrophoresed on SDS-PAGE and blotted onto nitrocellulose membranes, blocked with 10% BSA in TBST for 1 hr, probed with streptavidin conjugated to alkaline phosphatase at a 1:1000 dilution or an antibody against PR3 (Supp Fig. 5) (MPO (Dako Carpinteria, CA)), or COX5B (Abcam), and visualized using Western Blue Stabilized Alkaline Phosphatase Substrate (Promega, Madison, WI)

Supplemental Figure 4

PRTN3 gene locus



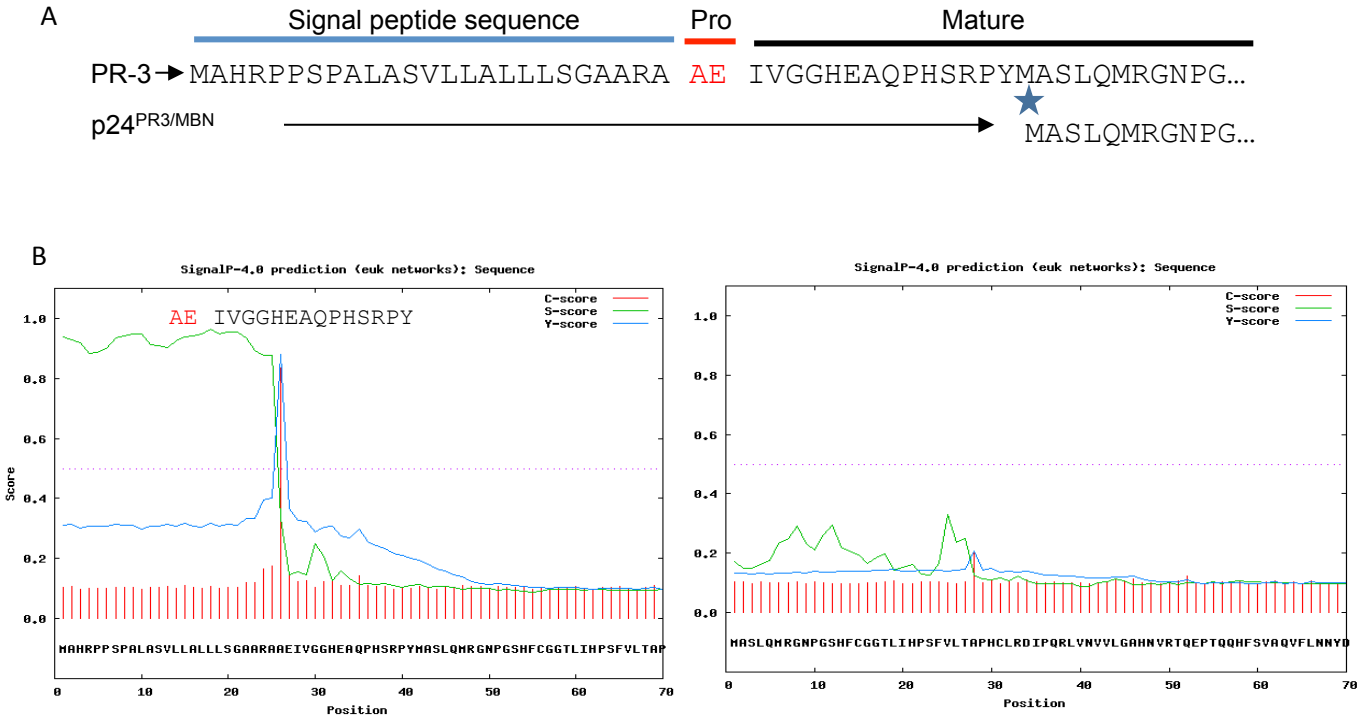
PRTN3



PRTN3-23-001	ENST00000234347	1012 nt
PRTN3-23-002	ENST00000544537	1041 nt

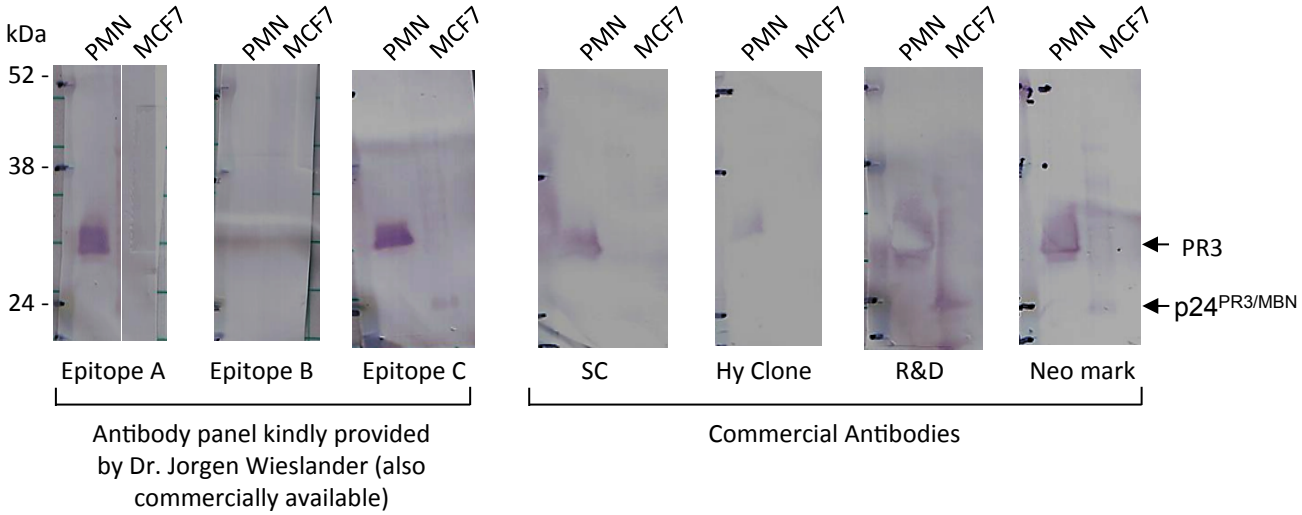
Supplemental Figure 3. Ensemble entry identifying a unique transcript from the *PRTN3* gene locus, expressed in adipose tissue and MCF7 breast epithelial cell.

Supplemental Figure 5



Supplemental Figure 6. In silico translation of *PRTN3-002* transcript indicates the protein lacks the signal peptide sequence present in PR3 that directs newly produced protein to the Golgi for posttranslational glycosylation. (B) bSignalP 4.0:Online tool verified sequence as a signal peptide: http://www.cbs.dtu.dk/servlices/SignalP/ Thomas Nordahl Petersen, Søren Brunak, Gunnar von Heijne & Henrik Nielsen *Nature Methods*, **8**:785-786, **2011**.

Supplemental Figure 6



Antibody	Cat #	Species
Epitope A	PR3.4A3	Mouse
Epitope B	PR3.4A5	Mouse
Epitope C	PR3.6A6	Mouse
Santa Cruz	Sc-28818	Rabbit
Hy Clone	HM2172	Mouse
R&D	AF6134	Sheep
Neo mark	MS-1333-P1	Mouse

Supplemental Figure 7. Identification of three anti-PR3 antibodies that are also reactive with the 24kDa $p24^{PR3/MBN}$ by western blot.

Supplemental Table 1. Characteristics of patients with ANCA associated vasculitis examined in this study

Patients	Sample	Gender	Race	DOB	Sample Date	Age	PR3	mRNA PRTN3-002	BVAS Score	MDActivityStatus	New Dx	ANCA serotype	ANCA Titer MPO	ANCA Titer PR3	GM-CSF (pg/ml)	Serum Creatinine (mg/dl)	Treatment: PredDose	MPDDose	CYIV	CYIVDose	YIV Last Dat	CYPO	RituxDose	Rituxan Last Dat	MMF/Cellcep	AZA/Imuran	CyA	Tacrolimus	lasmapheresis	Methotrexate	ACTH	Plaquenil
Pt 19a	2	M	W	5/10/57	11/1/00	43	+	+	15		GPA	PR3	13.5			2.2																
Pt 19a	1	M	W	5/10/57	11/6/00	43	+	+	10		GPA	PR3	13.5	3.5		1.9																
Pt 7a	1	F	W	7/15/39	11/30/00	61	+	-	0		GPA	PR3	85.2			0.7																
Pt 20a	1	M	W	1/12/37	3/29/01	64	+	+	3		GPA	PR3	47			1.1																
Pt 26a,e	1	M	W	9/25/67	2/4/02	34	+	+	18		MPA	PR3	1181			2.8																
Pt 20a	2	M	W	1/12/37	7/1/04	67	+	-	0		GPA	PR3	8.1			1.3																
Pt 37a	1	M	W	3/18/55	10/23/08	53	-	-	0		GPA	PR3	106.8			1.48																
Pt 14a	1	F	W	5/30/64	11/20/08	44	+	-	2		GPA	PR3	174.1			0.77																
Pt 48a,d,e	1	F	W	2/18/56	2/2/09	52	+	-	44		MPA	PR3	202.3		0	6.31																
Pt 49a	1	M	W	6/7/35	3/27/09	73	+	+	16		Lim	MPO	1.9	80.3		5.82																
Pt 25a	1	F	W	9/1/57	4/23/09	51	-	-	0		MPA	MPO		76.4		0.8																
Pt 66a	1	F	W	5/29/47	4/30/09	61	+	-	3		MPA	PR3	114			1.43																
Pt 46a	1	F	W	12/3/41	5/14/09	67	+	+	0		GPA	PR3	168	1.8		1.36					4/15/09	50mg qd		3/15/09								
Pt 46a	2	F	W	12/3/41	6/18/09	67	+	-	0		GPA	PR3	104.6	1.7		0.68																
Pt 15a	1	M	W	11/2/74	7/23/09	34	+	-	13		GPA	PR3	98.6	3.5		1.18																
Pt 51a,d,e	1	F	W	2/23/74	7/29/09	35	+	-	20		GPA	PR3	152.4	2.3	0	8.14		500														
Pt 52a	2	M	W	5/4/57	8/27/09	52	+	-	12	Active	MPA	PR3	81.9	2		3.7	60 QD		GM/M2		8/7/09											
Pt 51a,d,e	2	F	W	2/23/74	8/27/09	35	+	-	6	Active	GPA	PR3	123.8	1.8	0	7.2	50 QD															
Pt 13a	1	F	W	6/6/56	8/27/09	53	-	-	3		GPA	PR3	27	2		1																
Pt 45a,d	1	M	W	1/11/37	9/10/09	72	+	+	3		GPA	MPO	1.3	8.5	0																	
Pt 24a	1	M	W	12/22/59	10/1/09	49	+	-	0	Remission	Lim	PR3	43.9	2.1			2.5 QD								500 BID							
Pt 35a	2	M	W	9/2/90	12/17/09	19	+	+	0		GPA	PR3				1.52	5mg qd									150mg qd	75mg qd					
Pt 18a	1	F	W	12/29/85	12/17/09	23	-	-	18	Active	MPA	MPO	2.2	47.6		4									250 mg BID							
Pt 69a,d	1	F	W	3/17/50	12/17/09	59	+	+	8	Active	MPA	MPO	1.6	34.4	19.32	1.88	QD					QD										
Pt 30a	1	M	B	1/29/69	1/14/10	40	+	-	0		GPA	PR3	40	3.5		0.89	5 mg QD								500 mg BID		BID					
Pt 42a	1	M	W	1/23/42	1/15/10	67	+	+	0		MPA	neg	2.3	3.4		1.49																
Pt 28a	1	M	B	11/20/69	1/21/10	40	+	-	0	Remission	GPA	PR3				1.26										75 QD						
Pt 55a	2	F	W	11/17/57	1/21/10	52	+	+	0		MPA	MPO	2.5	13.5		1.22																
Pt 65a,d,e	1	M	W	9/3/61	1/28/10	48	+	-	0		MPA	PR3	184.5	3.5	0	0.99																
Pt 32a	1	M	W	6/3/88	2/11/10	21	-	-	1		GPA	PR3																				
Pt 39a,d	1	M	W	7/10/60	2/18/10	49	+	-	0		GPA	PR3	74	4	0	0.96																
Pt 43a	1	M	W	6/9/47	2/25/10	62	+	-	6	Active	GPA	PR3	31.2	2.7		1.82					2/1/10											
Pt 70a	1	M	W	9/2/85	3/4/10	24	+	+	2		MPA	PR3	65.8	3.6		1																
Pt 13a,d	2	F	W	6/6/56	3/11/10	53	+	-	0		GPA	PR3	40	1.4	10.25	0.83																
Pt 4a	1	F	W	10/3/56	3/18/10	53	-	-	2		GPA	MPO	2	29.7		1.05																
Pt 53a	1	F	W	1/11/51	5/13/10	59	+	-	3		MPA	MPO	1.6	101.1		2.03																
Pt 31a	1	F	W	4/13/80	5/20/10	30	-	-	1		GPA	PR3	63.8			0.78																
Pt 11a,d	1	F	W	6/15/58	5/20/10	51	+	-	6		MPA	PR3	100.3	2.1	5.46																	
Pt 34a	2	M	W	10/5/34	5/27/10	75	+	-	0		GPA	MPO	2.3	112.5		1.35																
Pt 35a	1	M	W	9/2/90	5/27/10	19	+	+	3		GPA	PR3			10.75	1.82																
Pt 76a,d	1	F	W	3/10/57	7/9/10	53	+	-	0		MPA	PR3	137.1	2.4	4.82	1.12																
Pt 57a	1	F	W	5/20/78	8/11/10	32	+	-	14	Active	MPA	PR3	85	3.2		1.85																
Pt 23a,d	1	F	W	3/10/47	8/12/10	63	+	+	9		GPA	MPO	2.9	49.2	0	1.39																
Pt 5a	1	M	W	7/21/63	8/12/10	47	+	-	22		MPA	O	142.9	110.6		2.06																
Pt 16a,d	1	F	W	1/12/40	8/26/10	70	+	+	9		MPA	PR3			0	1.01																
Pt 75f	1	M	W	11/30/52	9/2/10	57			3		GPA	PR3				0.96																
Pt 57a	2	F	W	5/20/78	9/3/10	32			5	Active	MPA	PR3				1.55																
Pt 41a	2	M	W	12/2/47	9/9/10	62	-	-	0		MPA	PR3	50	3.3		2.13									1500 QD							
Pt 17a	1	M	W	6/19/33	9/16/10	77	+	-	12		GPA	PR3	100.6	2.7		2.93																
Pt 73a	1	M	W	7/15/42	9/16/10	68	+	+	3		MPA	MPO	2.8	6.3																		
Pt 45a	2	M	W	1/11/37	9/23/10	73	+	+	0		GPA	MPO	2.2	5.1																		
Pt 59a,d	3	M	W	9/22/32	10/1/10	78	+	-	12	Active	Lim	MPO	3.6	35.9	0.46	2.84		YES													YES	
Pt 74a	1	F	W	1/7/57	10/6/10	53	+	-	3		Lim	MPO	52.5	1.8		1.58																
Pt 67a	1	M	W	9/9/35	10/7/10	75	+	-	0		GPA	MPO	1.5	9.3		2.53																
Pt 2a	1	M	W	1/31/61	10/14/10	49	-	-	3		GPA	MPO	3.4	85.1																		
Pt 21a	2	F	W	9/6/55	10/28/10	55	-	-	0		MPA	MPO	2	15		1.03	X															
Pt 68a	1	F	W	4/20/53	11/11/10	57	-	-	0		Lim	MPO	2.2	13.4		1.04																
Pt 60a	3	M	W	2/13/63	11/23/10	47	-	-	19		GPA	PR3	107.7	2.6		3.01	60 mg				11/16/10										YES	
Pt 59a	1	M	W	9/22/32	12/2/10	78	+	+	0	Unclear	Lim	MPO	2.2	11.8			60/10 alt		YES		11/7/10											
Pt 21a	1	F	W	9/6/55	12/2/10	55	+	-	0		MPA	MPO	2.2	9.2		0.99																
Pt 47a	1	F	B	2/10/69	12/9/10	41	-	-	3		GPA	MPO	3.8	2.6		0.7																
Pt 72a	1	F	W	10/6/64	1/13/11	46	+	-	0		GPA	PR3	67.2	4		1.96																
Pt 59a	2	M	W	9/22/32	2/10/11	78	+	-	0	Remission	Lim	MPO	1.4	11.5		2.07									500 BID							
Pt 60a,d	2	M	W	2/13/63	2/10/11	47	+	-	12	Active	GPA	PR3	52.1	2	15.93	2.07	40 QD						YES	1/17/11								
Pt 43a	2	M	W	6/9/47	2/17/11	63	+	-	0	Remission	GPA	PR3	22.8	2.7		1.93	X															
Pt 58a	1	F	H	11/23/62	2/17/11	48	-	-	0	Remission	GPA	MPO	3.1	3.9		1.8										100 QD						
Pt 34a	1	M	W	10/5/34	3/17/11	76	+	-	2	Active	GPA	MPO	1.9	53		1.19									500 BID							
Pt 61f	1	M	W	4/29/74	3/24/11	36			5	Active	GPA	PR3				0.92	40 QD		GM/M2		3/11/11		YES	12/22/10								
Pt 77a	1	M	W	10/13/41	3/24/11	69	+	+	13	Active	GPA	PR3	159.5	2.3		2.72	20mg qd				2/11/11											
Pt 3a	2	F	W	5/17/46	3/31/11	64	-	-	0		MPA	PR3	54.8	2.7		0.78																
Pt 50a	1	M	B	1/5/91	5/9/11	20	+	-	3	Active	uss	MPO	2.2	44.8		1.85	qod		0.75 g/m2		3/4/11		1gm	4/16/11								
Pt 30a	2	M	W	3/4/38	5/19/11	73	-	-	0		MPA	PR3	43.9	2.1		1.38																
Pt 60a	1	M	W	2/13/63	5/26/11	48	+	+	3	Active	GPA	PR3	55.4	2.5		6.17	QD		0.7 G/M2		5/26/11		YES	1/17/11								
Pt 40a,d	1	M	W	10/8/88	6/9/11	22	-	-	0		MPA	PR3	89.5	2.7	10.96	1.23																
Pt 38a,d	1	M	W	8/24/41	6/16/11	69	+	-	0		MPA	PR3	83.7	2.7	0	1.29																
Pt 12f	1	F	W	4/4/48	7/21/11	63			0		MPA	MPO	23.2	75.4		4.09																
Pt 77a	2	M	W	10/13/41	8/18/11	69	+	-	0	Active	GPA	PR3	123.7	3																		
Pt 29a	1	F	W	11/21/84	8/25/11	26	-	-	0		MPA	PR3	19.3	1.9	0	0.93																
Pt 41b,d	4	M	W	12/2/47	9/22/11	63			2	Active	MPA	PR3	72.8	2.4	0	2.18									500 BID							
Pt 52a	1	M	W	5/4/57	9/29/11	54	-	-	12	Active	MPA	PR3	164.6	2.3		3.3										75 QD						
Pt 22a	1	M	W	5/17/33	10/13/11	78	+	-	1	Active	GPA	MPO				1.62	X															
Pt 60b,d	4	M	W	2/13/63	10/13/11	48			4	Active	GPA	PR3	76.8	1.9	0	4.96	10 QOD								500 BID							
Pt 6a,b,c	1	F	B	5/31/66	10/17/11	45	+	-	4	Active	MPA	PR3																				
Pt 36a	1	M	W	8/14/81	10/20/11	30	+	-	0		MPA	MPO	3	29.1		2.26																
Pt 78a	1	F	W	10/28/38	10/27/11	72	+	+	0	Unclear	MPA	PR3	67.9	3.5		0.78	10 QD								500 QD							
Pt 71a,d	1	F	W	6/26/53	11/17/11	58	-	-	0	Remission	GPA	PR3	66.6	1.5	16.43	1.49							1 GM	7/13/11								
Pt 77a,d	3	M	W	10/13/41	11/17/11	70	+	-	6	Remission	GPA	PR3	94.1	1.6	2.82	1.87																
Pt 55a	3	F	W	11/17/57	12/15/11	54	+	-	6	Active	MPA	MPO	3.7	59.2		1.11	X															
Pt 41a	1	M	W	12/2/47	12/28/11	64	-	-	0	Active	MPA	PR3	76.4	2.8		2.12	10 QD						1 gm	12/16/11								200 BID
Pt 55a	1	F	W	11/17/57	1/12/12	54	+	-	7	Active	MPA	MPO	2.9	45.5		1.12									500 BID							
Pt 59a	4	M	W	9/22/32	1/19/12	79	+	+	0	Remission	Lim	MPO	23.6	2.2			X															
Pt 27a	1	F	B	10/4/63	1/25/12	48	-	-	6	Active	Lim	PR3	22	1.8		0.95	X															
Pt 3a	3	F	W	5/17/46	2/16/12	65	+	+	3	Active	MPA	PR3					15 QD															200 BID
Pt 10a	1	F	W	12/6/57	2/23/12	54	-	-	0	Active	GPA	PR3	32	1.3		2.5							Yes	10/25/11	1gm	BID						
Pt 54a	1	M	H	12/16/63	3/1/12	48	-	-	0	Remission	MPA	MPO	2.4	2.9		1.21	X															
Pt 63a	2	M	W	2/25/47	3/2/12	65	+	-	18	Active	MPA	PR3	149.9	1.4		3.32		YES													YES	
Pt 56a,c,d	1	F	W	2/21/84	3/15/12	28	+	-	0		Lim	MPO			0	0.71																
Pt 9a	1	F	W	9/21/94	3/21/12	17	-	-	10	Remission	Lim	MPO	4.8	38.5		0.68	X															
Pt 68a	2	F	W	4/20/53	3/21/12	58	-	-	0		Lim	MPO	2.2	30.2		0.97																
Pt 62f	1	F	B	12/23/25	3/22/12	86			0	Active	MPA	MPO	2.3	3.6		1.67										150 QD						
Pt 52a	3	M	W	5/4/57	4/5/12	54	-	-	0	Remission	MPA	PR3	31.4	2.2		3.1	X															
Pt 63a	1	M	W	2/25/47	4/26/12	65	+	-	3	Active	MPA	PR3	29.3	1.2		1.95	20 QD						YES	3/30/12								
Pt 3a	1	F	W	5/17/46	5/3/12	65	+	-	0	Remission	MPA	PR3	11.1	1		0.86	2.5 QD						YES	1/4/12								

Pt 44a	1	M	W	6/12/43	6/7/12	68	+	-	0	Remission	MPA	MPO	1.8	33.3		1.95						500 BID			
Pt 80a,d	1	F	W	12/19/56	6/13/13	56	+	+	9	Active	reviewed	PR3	26	2.1	6.82	0.94	60 alt. 30	0.75/m^2	5/24/13						
Pt 33a,c,d	1	F	W	11/27/84	6/17/13	28	+	+	8	Active	MPA	PR3			0	7.37	60 QD	YES	6/17/13						YES
Pt 79a,c,d	1	M	W	1/31/95	6/20/13	18	+	-	18	Active	reviewed	PR3	79	2	0		X								
Pt 1a,d	1	M	W	7/25/41	6/27/13	71	+	+	3	Active	reviewed	PR3	57.5	2.2	0	1.15	40 QD			150 QD					
Pt 41a,e	3	M	W	12/2/47	8/8/13	65	+	-	0	Unclear	MPA	PR3	139.9	2.4		2.15	X								
Pt 1a,d	2	M	W	7/25/41	8/29/13	72	+	-	0	Active	reviewed	PR3	69.7	1.7	5.14	1.23		1g/m^2	8/4/13						
Pt 80e	3	F	W	12/19/56	9/12/13	56	+	+	8	Active	reviewed	PR3	115.6	0.9		1.34							100mg qD		
Pt 38a,e	2	M	W	8/24/41	9/26/13	72	+	-	7		MPA	PR3	124.6	2.3		1.21	5mg qD					yes			
Pt 66a,e	2	F	W	5/29/47	10/3/13	66	+	-	1	Active	MPA	PR3	121.3	1.4		0.91						500 BID			
Pt 16a,d	2	F	W	1/12/40	10/10/13	73	+	-	0	Unclear	MPA	PR3			0	0.89						500 BID			
Pt 1a,d	4	M	W	7/25/41	10/24/13	72	+	-	14	Active	reviewed	PR3	146.4	2.2	0	1.48					1g	9/4/13			
Pt 64a,e	1	F	W	7/20/43	10/24/13	70	+	+	3	Active	reviewed	PR3	178.2	2.1		0.9	5 QOD	0.5g/m^2	10/1/13						
Pt 80a	2	F	W	12/19/56	12/19/13	56	+	-	0	Remission	reviewed	PR3	50.8	1.3		1.03					1g (2/2)	9/30/13			
Pt 16a	3	F	W	1/12/40	12/19/13	73	+	-	0	Remission	MPA	PR3	81.2	7.8		0.98						500 BID			
Pt 1a,d	3	M	W	7/25/41	1/9/14	72	+	-	0	Unclear	reviewed	PR3	74.2	1.6	0	1.31					1g	9/4/13			

a. RT-PCR for PR3 and PRTN3-002 transcripts, b and c. metabolic labeling for new MPO synthesis (b) and new PR3 synthesis (c),
d. ELISA for GM-CSF, e. immunoblot with patient sera for $p24^{HUMAN}$, f. northern
Samples are sorted based on Sample Identification number

Supplemental Table 2. Primers for northern probe, RT-PCR, 3'RACE, and Ligation anchored RT-PCR

Primer Name	Sequence	Product length
Northern probe		
PR3 336 exon 3	5'-GGT GTT TCT GAA CAA CTA CGA C-3'	292bp
PR3 627 exon 5	5'-TCC GAA GCA GAT GCC GGC CTT-3'	
Taqman and RT-PCR primers		
PR3 FOR ds exon 4	5'-TGT CAC CGT GGT CAC CTT CTT-3'	147bp
PR3 REV ds exon 5	5'-CCC CAG ATC ACG AAG GAG TCT AT-3'	
PR3 probe exon 4	FAM-TTG CAC TTT CGT CCC TCG CCG-TAMRA	
PR3 sense (exon 1 FOR)	5'-GAC CCC ACC ATG GCT CAC-3'	189bp
PR3 antisense	5'-CAA GGT GCC TCC GCA GAA-3'	
PRTN3-002 sense	5'-ATC GGG AGA CGG AGG CTC-3'	298bp
PRTN3-002 antisense	5'-CTC CGA GCA CCA CGT TCA-3'	
Cyclophillin FOR	5'-AGG CAG GAA AAG CAA GGA GCC A-3'	582bp
Cyclophillin REV	5'-TCA CTG CAG GTA GTC TGC GCC-3'	
PR3 sense (exon 1 FOR)	5'-GAC CCC ACC ATG GCT CAC-3'	986bp
PR3 exon 5, 3'UTR REV	5'-GGA GTT TCA ACG TTT ATT GAG GTC AC-3'	
PRTN3-002 intron 1 FOR	5'-GTT GCA GAT CGG GAG ACG-3'	1023bp
PR3 exon 5, 3'UTR REV	5'-GGA GTT TCA ACG TTT ATT GAG GTC AC-3'	
3' RACE primers		
PR3 374 exon 3 FOR	5'-ACG ACG TTC TCC TCA TCC AG-3'	
PR3 547 exon 4 FOR	5'-GTC ACC GTG GTC ACC TTC TT-3'	~500bp and ~580bp
PR3 617 exon 5 FOR	5'-TCT GCT TCG GAG ACT CAG GT-3'	~420bp and ~500bp
PR3 634 exon 5 FOR	5'-GGT GGC CCC CTG ATC TGT GAT G-3'	~400bp and ~480bp
Qo	5'-CCA GTG AGC AGA GTG ACG-3'	
Qi	5'-GAG GAC TCG AGC TCA AGC-3'	
Qt	5'-CCA GTG AGC AGA GTG ACG AGG ACT CGA GCT CAA GCT TTT TTT TTT TTT TTT T-3'	