Placenta-derived gp96 as a multivalent prophylactic cancer vaccine

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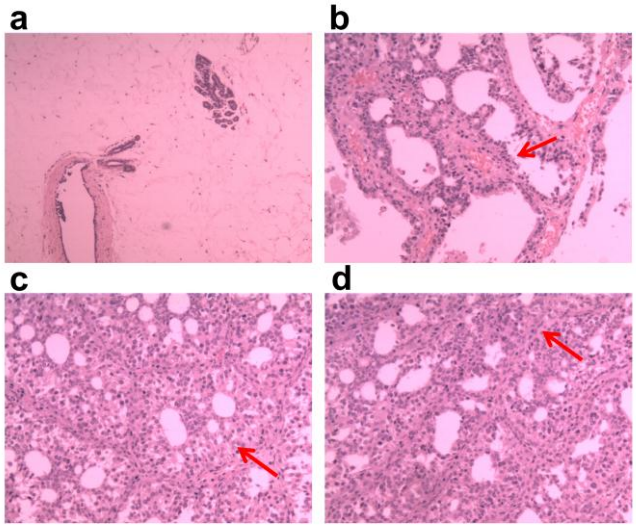

Supplementary Fig. S1 Mammary tumor histology. (a) Paraffin-embedded breast tissue sections from a P-gp96 immunized rat. (b-d) Paraffin-embedded breast tissue sections from unimmunized (PBS) rats. Intraductal proliferation (IDP) (b); ductal carcinoma *in situ* (DCIS) (c); and invasive ductal carcinoma (IDC) (d). Original magnification, ×40.

Supplementary Table. S1. Characteristics of DMBA-induced mammary tumors in PBS- and P-gp96-immunized female Wistar rats.

Characteristic	**PBS (n=7)**	**P-gp96 (n=5)**
Final body weight (g)	227±3.29	295±7.5
Tumor onset		
Day of first tumor [a]	91	No tumors present [c]
Tumor incidence (%)	7/7 (100)	0/5 (0 [c])
Tumor volume (mm^3)	6262.63±323.20	0 [c]
Mean tumor weight (g)	14.12	0 [c]
Multiplicity	7.4±2.1	0 [c]
Total tumors [b]	52	0 [c]
IDP	17	0
DCIS	17	0
IDC	18	0

[a] Post-DMBA day at which the first mammary tumor was detectable by palpation. No tumors were detected in the gp96 immunized rats by the end of the experiment. [b] Number of total mammary tumors graded as IDP, DCIS, or IDC. [c] $P<0.001$.

Supplementary Table S2. Primers for Real-time PCR.

Mouse MUC1	Forward: ATCGTCTATTTCCTTGCCCTG
	Reverse: TCCTACAAGTTGGCAGAAGTG
Mouse HER2	Forward: CCCTCATCACCTACAACACAG
	Reverse: CAGACCATAGCATACTCCAGC
Mouse MMP2	Forward: GTCTTCCCCTTCACTTTCCTG
	Reverse: CGGAAGTTCTTGGTGTAGGTG
Mouse FGF2	Forward: GGAGTTGTGTCTATCAAGGGAG
	Reverse: CAGTATGGCCTTCTGTCCAG
Mouse c-Myc	Forward: CTTTCCCTACCCGCTCAAC
	Reverse: CTTCTCCACAGACACCACATC
Mouse VEGF-a	Forward: GAGAGCAGAAGTCCCATGAAG
	Reverse: GCTTTGGTGAGGTTTGATCC
Mouse β-actin	Forward: ACCGTGAAAAGATGACCCAG
	Reverse: GAGCATAGCCCTCGTAGATG

Mouse GAPDH	Forward: AAATTCAACGGCACAGTCAAG
	Reverse: GTTCACACCCATCACAAACATG
Rat MUC1	Forward: TGGCTTTGGTCATCGTCTATC
	Reverse: CCTGTCGAAACCTCTTCATAGG
Rat HER2	Forward: TTTGGCACTGTCTACAAGGG
	Reverse: ACACCAGCCATCACATACG
Rat MMP2	Forward: TGAGAAGGATGGCAAGTATGG
	Reverse: TGTTGCCCAGGAAAGTGAAG
Rat FGF2	Forward: TCTACTGCAAGAACGGCG
	Reverse: TCGTTTCAGTGCCACATACC
Rat c-Myc	Forward: CTCGCGTTATTTGAAGCCTG
	Reverse: CAACATAGGACGGAGAGCAG
Rat VEGF-a	Forward: GAGTACCCCGATGAGATAGAGT
	Reverse: TTTGACCCTTTCCCTTTCCTC
Rat β-actin	Forward: CAACTGGGACGATATGGAGAAG
	Reverse: CAGAGGCATACAGGGACAAC
Rat GAPDH	Forward: ACAATGCCTGGATCCCTAAAG
	Reverse: CACACCGACCTTCACCATC
Human MUC1	Forward: TGGTCTGTGTTCTGGTTGC
	Reverse: CCCTACAAGTTGGCAGAAGTG
Human HER2	Forward: GAGACCCGCTGAACAATACC
	Reverse: CTTACACATCGGAGAACAGGG
Human MMP2	Forward: GAGTTGGCAGTGCAATACCT
	Reverse: GCCGTCCTTCTCAAAGTTGT
Human FGF2	Forward: CTGGCTATGAAGGAAGATGGA
	Reverse: TGCCCAGTTCGTTTCAGTG
Human c-Myc	Forward: TCAAGAGGCGAACACACAAC
	Reverse: GGCCTTTTCATTGTTTTCCA
Human VEGF-a	Forward: ATGACGAGGGCCTGGAGTGTG
	Reverse: CCTATGTGCTGGCCTTGGTGAG
Human β-actin	Forward: GCACTCTTCCAGCCTTCC
	Reverse: GTGATCTCCTTCTGCATCCTG
Human GAPDH	Forward: GTCCACTGGCGTCTTCAC
	Reverse: GAGTCCTTCCACGATACCAAAG