2 Materials

2.1 Laboratory equipment

Affymetrix computer workstation	Hewlett-Packard Company, USA
Affymetrix Fluidics Station 400	Hewlett-Packard Company, USA
Affymetrix Hybridization Oven 640	Hewlett-Packard Company, USA
Agilent Gene Array Scanner	Hewlett-Packard Company, USA
Balance	Mettler Toledo GmbH, Giessen, Germany
Centrifuge, 5417C	Eppendorf AG, Hamburg, Germany
Centrifuge, Avanti J20	Beckman Coulter GmbH, Krefeld, Germany
Film processor, Curix 60	Agfa-Gevaert, N.V., Mortsel, Belgium, Germany
Freezer, -80 °C	Thermo Quest Analytische Systeme, Egelsbach
Gel chamber (8 × 10.5 cm, for RNA)	Amersham Pharmacia Biotech, USA
Gel documentation system	Herolab GmbH, Wiesloch, Germany
GeneAmp PCR system 9600	The Pekin Elmer Corporation, CA, USA
Hybridization oven	Appligene Oncor, France
Incubator	Herolab GmbH laborgeräte, Wiesloch, Germany
Incubator shaker	New Brunswick scientific GmbH, Nürtingen
Mini Trans-Blot® Electrophoretic transfer Cell	Bio- RAD, California, USA
Mini-Protean®3 Cell	Bio- RAD, California, USA
Optima™ Ultracentrifuge	Beckman Coulter GmbH, Krefeld, Germany
PhosphorImager	Molecular Dynamics GmbH, Krefeld, Germany
Pipettes, adjustable	Gilson, Inc. France
Pipettes, adjustable, multichannel	Eppendorf AG, Hamburg, Germany
Plate sealer	Genetix, Christchurch, Dorset, UK
Power supply	Bio-Rad Laboratories GmbH, München, Germany
Sequence Detection system ABI Prism 7700	The Perkin Elmer Corporation, CA, USA
Shaker	Rocky, Fröbel Labortechnik, Wasserburg
Thermocycler (PTC100, PTC200)	MJ Research, Inc.; Watertown, USA
Thermomixer	Eppendorf AG, Hamburg, Germany
UV crosslinker	Stratagene, La Jolla, CA, USA
Vortex Genie 2	Scientific Industries, Inc. USA
Water bath	JULABO Labortechnik GmbH, Seelbach

2.2 Chemicals, Reagents, Enzymes, and Vectors

Chemical and reagents:

Acrylamide-Bis solution (29:1)	Serva, Heidelberg, Germany
Agarose	Gibco life Technologies, Karlsruhe, Germany
Agarose, small DNA low melt	Biozym, Hess. Oldendorf, Germany
Agarose, low melting point	Biozym, Hess. Oldendorf, Germany
Ammonium persulfate (APS)	Serva, Heidelberg Germany
Antibiotics (Ampicillin, Kanamycin)	Sigma, Deisenhofen, Germany
ATP	Amersham Pharmacia Biotech Europe, Freiburg
Betaine, anhydrous	Fluka, Taufkirchen, Germany
Bromophenol blue	Sigma, Deisenhofen, Germany
1,2-Bis (dimethylamino)ethane (TEMED)	Bio-Rad Laboratories, USA
Casamino acids	Difco, Becton Dickinson, Sparks, MD, USA
Complete protease inhibitor cocktail	Roche, Mannheim, Germany
[α-^{32}P] dCTP, [α-^{33}P] dCTP	Amersham Pharmacia Biotech Europe, Freiburg
dATP, dCTP, dGTP, dTTP sodium salt	Amersham Pharmacia Biotech Europe, Freiburg
Diethyl pyrocarbonate (DEPC)	Sigma, Deisenhofen, Germany
Ethidium bromide, 1%	Fluka, Taufkirchen, Germany
Ethylenediaminetetraacetic acid disodium salt dihydrate (EDTA)	Merck, Darmstadt, Germany
Ficoll	Fluka, Taufkirchen, Germany
Formaldehyde	Sigma, Deisenhofen, Germany
Formamide	Sigma, Deisenhofen, Germany
Glycerol	Merck, Darmstadt, Germany
Glycin	Merck, Darmstadt, Germany
Isopropanol	Merck, Darmstadt, Germany
Isopropyl β-D-1-thiogalactopyranoside (IPTG)	Biomol, Hamburg, Germany
β - Mercapto-ethanol	Sigma, Deisenhofen, Germany
2-Morpholinoethanesulfonic (MES) sodium salt	Sigma, Deisenhofen, Germany
3-[N-morpholino] propane sulfonic acid (MOPS)	Sigma, Deisenhofen, Germany
MES free acid monohydrate	Sigma, Deisenhofen, Germany
pd(NTP)$_6$, random hexamer primer, Na salt	Amersham Pharmacia Biotech Europe, Freiburg
Phenol	Carl Roth GmbH & Co, KG, Karlsruhe
Polyvinylpyrrolidone	Sigma, Deisenhofen, Germany,
Sodium dodecyl sulfate (SDS)	BDH laboratory, Germany
Tris base	Merck, Darmstadt, Germany
Trizma hydrochloride (Tris·Cl)	Merck, Darmstadt, Germany
TRIzol^{TM} reagent	Gibco Life Technologies, Mannheim, Germany
Tween 20	Sigma, Deisenhofen, Germany

Western Lighting™ Chemiluminescence Reagent	PerkinElmer Life Sciences, Boston, USA
X-Gal	Biomol, Hamburg, Germany

Other Chemicals and reagents not mentioned above were *pro analysi* quality.

Enzymes, antibody, and vectors

Advantage® 2 Polymerase	Clontech, Palo Alto, CA, USA
Anti-mouse IgG-HRP	Santa Cruz biotechnology, California, USA
Anti-rabbit IgG-HRP	Santa Cruz biotechnology, California, USA
Anti-rat IgG-HRP	Santa Cruz biotechnology, California, USA
Cd36 mouse monoclonal IgM antibody	Santa Cruz biotechnology, California, USA
Cd36 Rabbit polyclonal antibody (H-300)	Santa Cruz biotechnology, California, USA
DNA Polymerase I, Large Klenow Fragment	New England Biolabs GmbH, Schwalbach, UK
DNA Taq-Polymerase I	Promega, Mannheim, Germany
DNA Taq-Polymerase, AmpliTaq-Gold	PE Applied Biosystems, Weiterstadt, Germany
DNase (RQ1 Dnase)	Promega, Mannheim, Germany
*Eco*RI	New England Biolabs, UK
*Hin*fI	New England Biolabs, UK
pDriver Cloning Vector, U overhangs.	QIAGEN, Hilden, Germany
Proteinase K	QIAGEN, Hilden, Germany
*Pst*I	New England Biolabs, UK
PT-Adv Vector, linearized, 3' T overhangs.	Clontech, Palo Alto, CA, USA
Reverse Transcriptase Superscript II	Gibco life Technologies, Mannheim, Germany
RNase (DNase free)	QIAGEN, Hilden, Germany
RNase Inhibitor	Ambion, Austin, Texas, USA
T4 DNA ligase (Cloning)	QIAGEN, Hilden and Clontech, Palo Alto, CA, USA

2.3 Media and Solutions

Luria-Bertani medium (LB) medium	10 g bacto-tryptone, 5 g bacto-yeast extract, 10 g NaCl, pH 7.2, H_2O was added to 1 l, autoclaved.
LB agar	15 g/l bacto agar was added to LB medium, autoclaved.
Ampicillin agar plate	Ampicillin solution (50 mg/ml) was added to LB agar to a final concentration of 50 μg/ml.
Kanamycin agar plate	Kanamycin solution (30 mg/ml) was added to LB agar to a final concentration of 30 μg/ml.
Antibiotics	50 mg/ml ampicillin (in 50% ethanol). 30 mg/ml kanamycin.

Labeling solution (LS)	50 µl hepes buffer, 50 µl TM buffer (250 mM Tris·Cl, pH 8.0, 25 mM $MgCl_2$, 50 mM β-mercaptoethanol), 14 µl 1:8 diluted hexanucleotide pd $(N)_6$ from Pharmacia (1 ml).
Denaturing buffer	0.5 M NaOH and 1.5 M NaCl.
10× DNA loading buffer	0.2% bromophenol blue, 60% glycerol, 60 mM EDTA.
10× Leo' s buffer	50 m1 1 M KCl, 1 ml Tween 20, 1.5 ml 1 M $MgCl_2$, 15 ml 1 M Tris·Cl, 35 ml 1 M tris-base, autoclaved, then 1.5 ml filter cleaned 0.1 M cresol red in ethanol was added.
DEPC treated water	0.01% (v/v) DEPC water was prepared using double distilled sterile water, stirred overnight, then autoclaved twice to remove the DEPC.
Hybridization buffer for cDNA filter	1 M NaCl, 1% SDS, 10 mM Tris·Cl.
Washing buffer I	2× SSC, 0.1% SDS.
Washing buffer II	0.1× SSC, 0.1% SDS.
Neutralization buffer	1 M Tris·Cl, 1.5 M NaCl, pH 7.5.
10× Formaldehyde agarose (FA) gel buffer	200 mM MOPS, 50 mM sodium acetate, 10 mM EDTA, prepared using DEPC-treated water, adjusted to pH 7.0 with NaOH, stored at 4 °C.
1× FA gel running buffer	100 ml 10× FA gel buffer, 20 ml 37% (12.3 M) formaldehyde, 880 ml DEPC-treated water.
1.2 % FA gel	1.2 g agarose, 10 ml 10× FA, RNase-free water was added to 100 ml, agarose was melted in microwave. Cooled to 65 °C in a water bath. 1.8 ml 37% (12.3M) formaldehyde and 1 µl of ethidium bromide (10 mg/ml) were added, mixed thoroughly and poured onto gel support. Prior to running the gel, the gel was equilibrated in 1× FA gel running for at least 30 min.
5× RNA loading buffer	16 µl saturated bromophenol blue solution, 80 µl 500 mM EDTA, pH 8.0, 720 µl 37% formaldehyde, 2 ml 100% glycerol, 3084 µl formamide, 4 ml 10× FA gel buffer, DEPC-treated water was added to 10 ml. The buffer can be used for 3 months when stored at 4 °C.
20× SSPE	3 M NaCl, 0.2 M $NaH_2PO_4·H_2O$, 0.02 M Na_2-EDTA, adjust to pH 7.4, autoclaved.
50× Denhardt's	5 g Ficoll, 5 g polyvinylpyrrolidone, 5 g bovine serum albumine and DEPC treated water was added to final volume 500 ml. Stored at -20 °C in 10 ml aliquots.
Hybridization buffer for Northern blots	5× SSPE, 5× denhardts, 0.1% SDS, 100 µg/ml denatured salmon sperm, 50% deionized formamide, freshly prepared.
20× SSC (pH 7.5)	3 M NaCl, 0.3 M Na_3-citrate.
Stripping solution	0.1% SDS, 2 mM EDTA.

50× TAE buffer	242 g Tris base, 57.1 ml glacial acetic acid, 100 ml 0.5 M EDTA, sterile water was added to 1 liter, pH 8.0, autoclaved.
12× MES	1.22 M MES, 0.89 M [Na^+]: 70.4 g MES free acid monohydrate and 193.3g MES Sodium Salt, mixed and adjusted volume to l litre with sterile water, pH 6.5 to 6.7. Filtered through a 0.2-μm filter.
2× MES hybridization buffer	8.3 ml of 12× MES Stock, 17.7 ml of 5 M NaCl, 4.0 ml of 0.5 M EDTA, 0.1ml of 10% Tween 20, 19.9 ml of water. Final 1× MES is 100 mM MES, 1M [Na^+], 20 mM EDTA, 0.01% Tween 20.
10× TBE buffer	108 g Tris base, 55 g boric acid, 40 ml 0.5 M EDTA, water was added to 1 litre, pH 8.0, autoclaved.
TE buffer	10 mM Tris base, 1 mM EDTA, pH 8.0
5× TEN9 buffer	250 mM Tris base, pH 9; 100 mM EDTA; 200 mM NaCl.
Stringent wash buffer	100 mM MES, 0.1M [Na^+], 0.01% Tween 20: 83.3 ml of 12× MES stock buffer, 5.2 ml of 5 M NaCl, 1.0 ml of 10% Tween 20, 910.5 ml of water. Filtered through a 0.2 μm filter.
Non-Stringent wash buffer	6× SSPE, 0.01% Tween 20, 0.005% Antifoam: 300 ml of 20× SSPE, 1.0 ml of 10% Tween-20, 698 ml of water, filtered through a 0.2 μm filter. 1.0 ml 5% antifoam was added after filtered.
2× Stain buffer	100 mM MES, 1M [Na^+], 0.05% Tween 20, 0.005% Antifoam: 41.7 ml 12×MES stock buffer, 92.5 ml 5 M NaCl, 2.5 ml 10% Tween 20, 112.8 ml water, filtered through a 0.2 μm filter.
10 mg/ml goat IgG stocks	50 mg goat IgG was resuspended in 5 ml PBS, Stored at 4 °C.
SAPE stain solution 1 and 3	600 μl 2× stain buffers, 540 μl water, 48 μl acetylated BSA (50mg/ml), 12 μl SAPE (1mg/ml). Freshly prepared before use.
SAPE stain solution 2	300 μl 2× stain buffer, 266.4 μl water, 24 μl BSA (50mg/ml), 6 μl Goat IgG, 3.6 μl Biol AB. Freshly prepared before use.
5% Antifoam stock solution	5% solution of antifoam was prepared using sterile water without filter.
X-gal solution	X-gal was dissolved in dimethylformamide to a concentration of 20 mg/ml and stored at -20 °C.
1.5 M Tris·Cl, pH 8.8	27.23 g Tris base was dissolved in 80 ml sterile water, adjusted to pH 8.8 with 6 N HCl. Brought total volumes to 150 ml with sterile water, and stored at 4 °C.
0.5 M Tris·Cl , pH 6.8	6 g Tris base was dissolved in 60 ml sterile water, adjusted to pH 6.8 with 6 N HCl, Brought total volume to 100 ml with sterile water, stored at 4 °C.
Protein loading buffer	3.55 ml sterile water, 1.25 ml 0.5 M Tris·Cl (pH 6.8), 2.5 ml glycerol, 2.0 ml 10% (w/v) SDS, 0.2 ml 0.5% (w/v) bromophenol blue, stored at room temperature. 50 μl of β-Mercaptoethanol was added to 950 μl sample buffer prior to use.
10× PBS	80 g NaCl, 2.5 g KCl, 14.3 g Na_2HPO_4, 2.5 g KH_2PO4, pH 7.4, sterile water was added to 1 l, autoclaved.

10× SDS-PAGE running buffer, pH 8.3	30.3 g Tris base, 144.0 g glycine, 100 ml 10% SDS, sterile water was added to 1000 ml.
10% APS	100 mg ammonium persulfate was dissolved in 1 ml of sterile water, stored at -20 °C in 100 µl aliquots, can be used for a few weeks.
Resolving Gel (8%)	4.7 ml sterile water, 2.7 ml 30% acrylamide/Bis, 2.5 ml 1.5 M Tris·Cl (pH 8.8), 0.1 ml 10% SDS. 50 µl 10% APS and 5 µl TEMED were added immediately prior to pouring the gel.
Stacking Gel (5%)	5.7 ml sterile water, 1.7 ml 30% acrylamide/Bis, 2.5 ml 0.5 M Tris·Cl (pH 6.8), 0.1 ml 10% SDS. 50 µl 10% APS and 10 µl TEMED were added immediately prior to pouring the gel.

2.4 Oligonucleotides

Table 2.1 **Standard primers**

Primer name	**Forward (5' -> 3')**	**Reverse (5' -> 3')**	**T_{ann} (^oC) [1]**
GAPDH	ACCACAGTCCATGCCATCAC	TCCACCACCCTGTTGCTGTA	60
M13	TGTAAAACGACGGCCAGT	CAGGAAACAGCTATGAC	65
Angi_intron	GTCCTGTAATCCCTCCTGAAG	AAAACCCACTTTGTGTTGTCA	55
M13 R [2]	CAGGAAACAGCTATGAC		50
M13 F (-40) [2]	GTTTTCCCAGTCACGACG		50
M13 UP (-21) [2]	CGACGTTGTAAAACGACGGCCAGT		55
T7-$(dT)_{24}$primer:	GGCCAGTGAATTGTAATACGACTCACTATAGGAGGCGG-$(dT)_{24}$		

1, the annealing temperature of each PCR. 2, primers used for sequencing.

Table 2.2 **Rat microsatellite and gene specific primers for genotyping**

Primer name	**Forward (5' -> 3')**	**Reverse (5' -> 3')**	**T_{ann} (^oC)**
Cd36 Hinf	ACA KMY TTA TCA AAA AGT CCA AGT CTT CTA TGT TC (K: G/T, M: A/C, Y: C/T)	ACC AAC TGT GGT ACT TAT AG	43
D4 Bor1	TTGGAGGAGTTTGAGGACCC	AGTCACTGCCTGCAAGCTCT	52
D4 RAT6	TTTTGACATTGAGTCGCAGG	ATTGTCCTGCTGTCCTTCGT	58
D4 RAT221	CCTATTTCAGCCTCTGCAGG	AAAAATATTTATTCTGCTCTCCGTG	51

Table 2.3 **Gene *Cd36* specific primers**

Primer name	Forward (5' -> 3')	Reverse (5' -> 3')	T_{ann} (^{o}C)
Cd36 A	GGCATTGTA ATTGTACCTGTG	CAGTGAAGGCTCAAAGATGG	55
Cd36 B	CAAGGTTATACAGAGAGGTCCT	TCAAACACAGCATAGATGGAC	58
Cd36 C	GGTGAGAAGTCTCGA ACACTG	TCCATTCTTAGATCTGCAAGC	58
Cd36 D	TGGTCTTACTTGGTGTTGGAG	AATATCTGTGATACCTGGCCTT	62
Cd36 E	TGACTGTCAGCACATGATATG	GGAATTTAAGAACATCTTTAATGT	55
Cd36 F	TGATTTCATACTGTGCTTGCA	GCATGTTGTGCTATTAAGCTC	58
Cd36 G	GGTGGATGCTTGTAGATGCTA	GCAAGACAAAGGTTATGGTTA	60
Cd36 intron 3 I	TAGAACAGGATCCCAAAGAGG	GTTTAACCTTGATCTTGCTGC	48
Cd36 intron 3 II	CACACACACCATACCACGCTT	AACAGCAGCAACAGCAACAAC	48
Cd36 intron 3 III	CACTAGAAAGAAGCTGGGCAA	ATGGATATTTCCTCTTTGGGA	45
Cd36 intron 3 IV	GTTAAAGATGGTTTTCACGGG	ATGGATATTTCCTCTTTGGGA	43
*C*d36 intron 4 I	GCAAAGAA AGCAGCAAGATC	TTTCTTCCAACAAAAGGTGCT	51
Cd36 intron 4 II	TGAAATATGTGCATCTAGGGG	CCTTTGTTTGAGGCAACTAGG	51
CD36 intron 4 III	GCCCTTGTATGTCTGAAATCT	GAAGGACTAATCGTAGCAAGG	41

Table 2.4 **Primers for *Cd36* 5' and 3' RACE**

Primer name	Sequence (5' -> 3')
SMART II oligonucleotide	AAGCAGTGGTAACAACGCAGAGTACGCGGG
5'- RACE cDNA Synthesis primer (5'-CDS)	5'-$(T)_{25}N_{-1}N$-3' (N = A, C, G, or T; N_{-1} = A, G, or C)-3'
3'- RACE cDNA Synthesis primer (3'-CDS)	5'-AAGCAGTGGTAACAACGCAGAGTAC$(T)_{30}N_{-1}N$-3'
10x Universal Primer Mix (UPM) long	CTAATACGACTCACTATAGGGCAAGCAGTGGTAACAACGCAGAGT
10x UPM short	CTAATACGACTCACTATAGGGC
Nested Universal Primer	AAGCAGTGGTAACAACGCAGAGT
Gene Specific Primer 1 (GSP1, Reverse)	TGGTTGTCTGGGTTCTGGAGTGG
GSP2 (Forward)	GGTGGATGCTTGTAGATGCTA
GSP3 (Reverse)	CGCACACCACCGTTTCTTCAACT
GSP4 (Forward)	TAAATGAGACTGGGACCATCGGC

GSP1 was designed according to *Cd36* cDNA sequence (GenBank accession number AF072411, position 931) for amplifying 5' RACE PCR products from SHHF strain. GSP2 was designed according SHHF *Cd36* draft sequence (acquired in this study, unpublished) for amplifying 3' RACE PCR products from SHHF strain. GSP3 and GSP4 were designed based on *Cd36* cDNA sequence (GenBank accession number L19658, position 1597 and 1320) for amplifying 3' and 5' RACE PCR products from WKY strain.

Table 2.5 Primers for quantitative Real-Time PCR

Gene name and symbol	Accession number	Sequence (5' -> 3')
18s	M11188	Oligo 1: CGCCGCTAGAGGTGAAATTC Oligo 2: TTGGCAAATGCTTTCGCTC Probe: 6-FAM-TGGACCGGCGCAAGACGGAC-TAMRA
Gapdh	M17701	Oligo 1: AAGTATGATGACATCAAGAAGGTGGT Oligo 2: AGCCCAGGATGCCCTTTAGT
Rpl	X82550	Oligo 1: TGACTACCTTCCTCACAACCAAAA Oligo 2: CCAGAATGCCAAAGGTCCA Probe: 6-FAM- AGTCCCGCTGGCCCTCTGCC -TAMRA
HSPB2	U75899	Oligo 1: AGAGCTGCTCTCTCCCATGATG Oligo 2: TCCAGATGCCGGCCA Probe: 6-FAM- ATCCTTAACTTGGAGGCACCGCGG -TAMRA
Ucp1	A04674	Oligo 1: ACGTCCCCTGCCATTTACTG Oligo 2: ACCGGAGAGGCCAGGAGT
Pdk4	AF034577	Oligo 1: ACCAACCCTACGGATCCTAGC Oligo 2: GAAACGGGCTGCCTTCATC
Ptpn16	U02553	Oligo 1: GGGAGGTGTGGAGTTTCACG Oligo 2: GTTATTGCATTGCTCCTCCCA
Cd36	AF072411	Oligo 1: TGCTGCACGAGGAGGAGAA Oligo 2: GGACAGCACCAATAACGGCT Probe: 6-FAM-TGCGATCGGAACTGTGGGCTCA -TAMRA
Cd36	AA799326	Oligo 1: CTCAACAAAAGGTGGAAAGGAGG Oligo 2: AAGGAATTTGTCCTATTGGRAAAGT (R: G/A) Probe: 6-FAM-TGCATCTGTGCCATTAATCATGTCGCA-TAMRA
Cd36	AA925752	Oligo 1: TCTCAACCAGGCCCAGGAG Oligo 2: CGGCGATGAGAAAGCAGAA
Cd36	AB005743	Oligo 1: TGCTGCACGAGGAGGAGAAT Oligo 2: GCACCAATAACGGCTCCAGTA
Wfdc1	AF037272	Oligo 1: ACTTGGCGGAAGCCCCT Oligo 2: TAGAAGCTGCGGGTTCCTGT
Fbp2	AJ005046	Oligo 1: CAGAGGATGAGCCTTCCGAG Oligo 2: CAGTGCATAACCTGCAGCCA
Anti-acetylcholine receptor	L22654	Oligo 1: TCCAGCCAGGCCGTCA Oligo 2: GGCACAATTTTCTTGTCCACC
Cyp2e1	M20131	Oligo 1: CAAACAAACACGTGCAAACATG Oligo 2: AAGCTGTCCTCCCCCTGG
Csrp2	U44948	Oligo 1: GTGGATGGCCTTACCGCA Oligo 2: GCGTGTGTGCTACACAGTGCT
Serpinh1	M69246	Oligo 1: CATGCGCTCTCTCCTTCTGG Oligo 2: TTTCTTCACCTCGGCTGCC
Col3a1	M21354	Oligo 1: CTGCCATTGCTGGAGTTGG Oligo 2: TTGATCTTGAAATCCATTGGATCA
Il2rb	M55050	Oligo 1: ACCACTCTCTGCCCCATTTCT Oligo 2: GGACAGCTGACCCACAGCA
Nupr1	AF014503	Oligo 1: GGTCGGAAAGGACGTACCAA Oligo 2: TTCCTCTCATGCCCACCAG
Ccnd2	D16308	Oligo 1: CAGGACGAGGAAGTGAATGCA Oligo 2: GGGTGATCTTGGCCAGCA
Sult1a1	L19998	Oligo 1: TGAAAGTCAAGGTCCGGGTAAA Oligo 2: CCTCGGACTTGTGCACCTCTA
SC2	S45663	Oligo 1: GTGGTATCCTGCCCGCC Oligo 2: CACATCTTCATCTTTCAGGGACTTC

2.5 Animals

Inbred animals of the rat strains SHHF, SHRSP, SHR, and WKY along with their heart tissue were used in this study.

2.6 Kits and other materials

ABI PRISM BigDye Terminator Cycle sequencing ready reaction kit	PE Applied Biosystems, Foster City, CA, USA
Dynabeads mRNA DIRECT™ kit	Dynal AS, Oslo, Norway
DNeasy™ Tissue	QIAGEN, Hilden, Germany
PCR select cDNA subtraction kit	Clontech Laboratories, Palo Alto, CA, USA
cDNA synthesis system 1117831	Roche Diagnostics Corporation, Germany
Plasmid-Mini kit	QIAGEN, Hilden, Germany
QIAquick PCR purification kit	QIAGEN, Hilden, Germany
QIAGEN PCR Cloning kit	QIAGEN, Hilden, Germany
RNeasy kit	QIAGEN, Hilden, Germany
T7 megascript kit **(**Ambion 1334**)**	Enzo Diagnostics, Germany
SMART™ RACE cDNA Amplification kit	Clontech Laboratories, Palo Alto, CA, USA
SYBR Green PCR core reagent kit	PE Applied Biosystems, Foster City, CA, USA
TaqMan universal PCR master mix	PE Applied Biosystems, Foster City, CA, USA
3 MM Blotting paper	Whatman GmbH, Gottingen, Germany
MicroAmp optical 96-well reaction plates	PE Applied Biosystems, Foster City, CA, USA
Microseal™ "A" film	Biozym, MJ Research, Inc. Watertown MA, USA
MicroSpin G50-columns	Amersham Pharmacia Biotech, USA
Protran BA83 (0.2 μm)	Schleicher & Schuell, Germany
PCR plates, 96-well	Abgene, Surrey, UK
Polypropylene tubes (15 ml and 50 ml)	Greiner Labortechnik GmbH, Frickenhausen, Germany
Cellulose nitrate membrane (0.2 μm)	Nalgene, Hamburg, Germany
DNA marker, PhiX174 *Bsu*RI (*Hae*III)	MBI Fermentas, Germany
Precision protein standards (unstained/ prestained)	Bio-Rad , USA
RNA Ladder, high range	MBI Fermentas, Germany
Nylon filter, 222 × 222 mm Hybond- N+	Amersham Pharmacia Biotech Europe, Freiburg, Germany

2.7 Computer software and databases

Table 2.6 **Computer software and databases**

Name	Source	URL
Affymetrix Microarray Suite software	Hewlett-Packard Company, USA	http://www.affymetrix.com/
Affymetrix Data Mining Tool™ software	Hewlett-Packard Company, USA	http://www.affymetrix.com/
Affymetrix Microarray Laboratory Information Management System	Hewlett-Packard Company, USA	http://www.affymetrix.com/
Blast	NCBI, Bethesda, USA	http://ncbi.nlm.nih.gov
Blast	Ensembl, The Wellcome Trust Sanger Institute	http://www.ensembl.org/
DNAStar	Madison, Wisconsin, USA	http://www.dnastar.com/
7700 sequence detection software	Applied biosystems, Weiterstadt	http://home.appliedbiosystems.com/
NEBcutter v1.0	New England, Biolabs, UK	http://tools.neb.com/NEBcutter/
Oligo	MBI, USA	http://www.oligo.net/
Office 2000	Microsoft, USA	http://www.microsoft.com/office/
Primer Express	Applied Biosystems, eiterstadt	http://home.appliedbiosystems.com/
Visual Grid	GPC biotech, Munich	http://www.GPC-Biotech.com
Genome Data	NCBI, Bethesda, USA	http://ncbi.nlm.nih.gov
Genome Data	Celera, USA	http://www.celera.com/
Genome Data	Ensembl, The wellcome Trust Sanger Institute, UK	http://www.ensembl.org/
Geneontology Data	Gene Ontology TM (GO) Consortium, USA	http://www.geneontology.org/
Protein Data	Expasy, NCSC, USA	http://www.expasy.org/
Gene Data	GeneCards, Weizmann Institute of Science, Israel	http://bioinformatics.weizmann.ac.il/cards/