SUPPLEMENTAL MATERIALS

TABLE. S1. **List of gene-specific primer sets for SYBR Green real-time qPCR and RT-PCR.**

gene name	gene symbol	forward primer	reverse primer
GAPDH	GAPDH	ACCCACTCCTCCACCTTTGAC	TCCACCACCCTGTTGCTGTAC
caldesmon	CALD1	CGCCAGAAGATGCCAGAAGATG	TTGGAGACTATTGCTGCTTGATGG
tropomyosin 1	TPM1	CGGTCGGCATCTTCAGCAATG	GAGAGTGAGAGAGGCATGAAAGTC
tropomyosin 2	TPM2	CAGAAATTGCCAACATTGC	AAACCATGAAGCCAGTGC
fascin 1	FSCN1	GGAGACCGACCAGGAGAC	CATTGGACGCCCTCAGTG
filamin A	FLNA	CATCAAGTACGGTGGTGACG	ACATCCACCTCTGAGCCATC
p34Arc	ARPC2	ACAGAGTCACAGTAGTCTTCAG	TAATGTAGCCAATGTTGTCACC
p21Arc	ARPC3	AGATACAGATATTGTGGATGAAGC	ATACATTTCTTTCTCACCTTGGC
vinculin	VCL	TCAGATGAGGTGACTCGGTTGG	GGGTGCTTATGGTTGGGATTCG
zyxin	ZYX	AGGCAGAATGTGGCTGTCAAC	GGTGAAGCAGGCGATGTGG
talin 1	TLN1	CCCTGATGTGCGGCTTCG	TGTCCTGTCAACTGCTGCTTC
paxillin	PXN	CCCTGACGAAAGAGAAGCCTAAG	AGATGCGTGTCTGCTGTTGG
actinin 1	ACTN1	CCAAGATTGTCCAGACCTACCAC	CCTCTCATTGTGCTGCTGTCG
cortactin	CTTN	GCCGACCGAGTAGACAAG	GTATTTGCCGCCGAAACC
β1−catenin	CTNNB1	GGGTCCTCTGTGAACTTGCTC	TTCTTGTAATCTTGTGGCTTGTCC
α1−integrin	ITGA1	GGTGCTTATTGGTTCTCCGTTAG	TTCTCCTTTACTTCTGTGACATTGG
β1−integrin	ITGB1	GAGGAGGATTACTTCGGACTTCAG	GCTGGTGTTGTGCTAATGTAAGG
gelsolin	GSN	TGTCCTACCTTTCCAGCCATATCG	TGTCGCCTCCATAGAACTGTCC
profilin 1	PFN1	GGGAAAACGTTCGTCAACAT	ACACCTTCTTTGCCCATCAG
cofilin 1	CFL1	GCCAACTTCTAACCGCAATAG	CCTTACTGGTCCTGCTTCC
β actin	ACTB	GAACGGTGAAGGTGACAG	TTTAGGATGGCAAGGGACT
tubulin α1a	TUBA1A	GACGACTCCTTCACCACCTTC	GCATAGTTGTTGGCAGCATCC
EGFP	EGFP	ACGTAAACGGCCACAAGTTC	AAGTCGTGCTGCTTCATGTG
total CaD		GCAGAAAAGCAGTGGTGTCA	GCGAATTAGCCCTCTACAACTG
fibroblast CaD		CCTCGGGAAGAAGTTTCAGA	GTTGGGTCGAACTCCTTCTG
HeLa CaD		GACAAGCCCAGACTTTCGTC	GTTGGGTCGAACTCCTTCTG

SUPPLEMENTAL FIGURE LEGENDS

FIGURE S1. **GC-dependent transactivation driven by the retroviral expression system.** First cDNA was synthesized from the GFP-A549 cells, which were stably transfected by retroviral infection, and treated with vehicle or 1 μM DEX for 24 hours. Real-time qPCR was then performed using the cDNAs. The expression level of GFP was normalized to the GAPDH expression in each sample (mean ± SD, ***, $p < 0.001$).

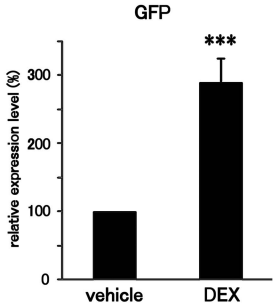
FIGURE S2. **Comparison of the expression of the two CaD mRNAs.** A549 cells were incubated with vehicle or 1 μM DEX for the indicated times. The expression levels of CaD mRNA were measured by semi-quantitative RT-PCR using three primer sets, one each for the fibroblast- and HeLa-type CaDs, and one to ascertain the total CaD mRNA.

FIGURE S3. **Alignment of the fibroblast-type *CALD1* gene promoter region from various species.** Proximal regions of the fibroblast-type *CALD1* gene of Human (*H. sapiens*), rat (*R. norvegicus*), and mouse (*M. musculus*) are shown. The conserved residues are shaded. The two GRE-like sequences (GRE-like1 and GRE-like2) are underlined.

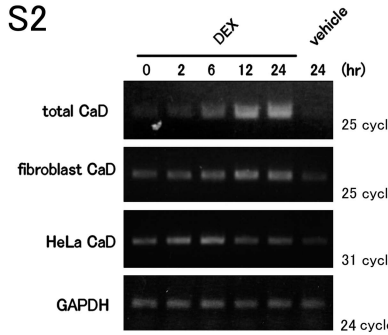
FIGURE S4. **Effect of CaD depleation on stress fiber stability to cytochalasin D.** A549 cells transfected with CaD siRNAs or control siRNA were incubated with vehicle or 1 μM DEX for 48 hr. The cells were treated with or without 0.2 μM cytD for 20 min, and stained with phalloidin. Bar: 50 μm.

FIGURE S5 **GFP-CaD expression counteracts the effects of endogenous CaD depletion.** Effect of DEX on the actin cytoskeleton of GFP-CaD-expressing A549 cells, which were depleted of endogenous CaD by the CaD siRNA2. The cells were stained with anti-GFP (*green* in merged image), anti-CaD (*red* in merged image), and phalloidin (*blue* in merged image). Bar: 50 μm.

S1


GFP
***
relative expression level (%)
300
200
100
0
vehicle
DEX

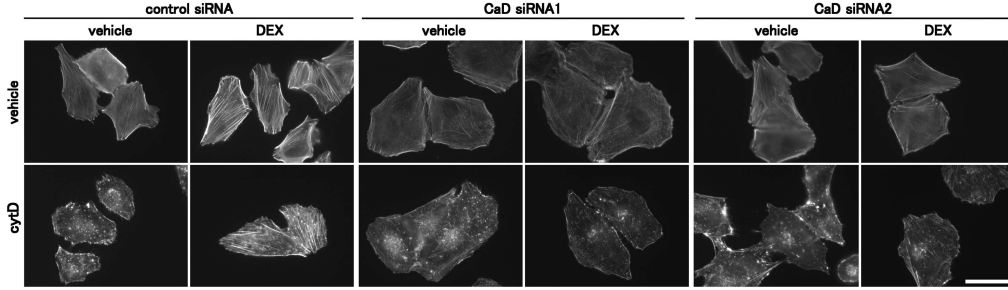
S2


DEX
vehicle
0 2 6 12 24 24 (hr)
total CaD
25 cycles
fibroblast CaD
25 cycles
HeLa CaD
31 cycles
GAPDH
24 cycles

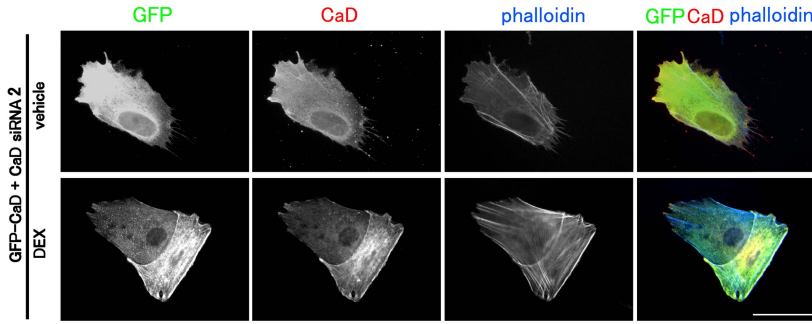
S3


H. sapiens
R.norvegicus
M.musculus
GRE-like 1
H. sapiens
R.norvegicus
M.musculus
GRE-like 2

S4


control siRNA
CaD siRNA1
CaD siRNA2
vehicle
DEX
vehicle
DEX
vehicle
DEX
vehicle
cytD

S5


GFP
CaD
phalloidin
GFP CaD phalloidin
GFP-CaD + CaD siRNA 2
vehicle
DEX