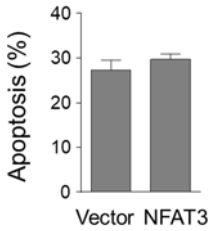
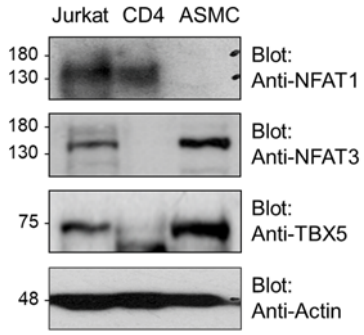
Fig. S1.



Supplementary Figure 1: Effect of NFAT3 on apoptosis of CD4$^+$ T cells

Human CD4$^+$ T cells were transfected with NFAT3-expressing or non-expressing vector (5 µg). At 48 h after transfection, cells were stained with PI + annexin V and analyzed by flow cytometry. The percentages of apoptotic cells as PI$^-$ cells in H-2K^{k+}annexin V$^+$ cells were determined (n =4).

Fig. S2.



Supplementary Figure 2: Expression of NFAT and TBX5 in Jurkat-TAg cells, CD4$^+$ T cells and ASMC

The expression of NFAT1, NFAT3, TBX5 and actin was analyzed by immunoblotting of whole cell lysates with their specific Ab. The results shown are representative of at least two separate experiments.

Fig. S3.

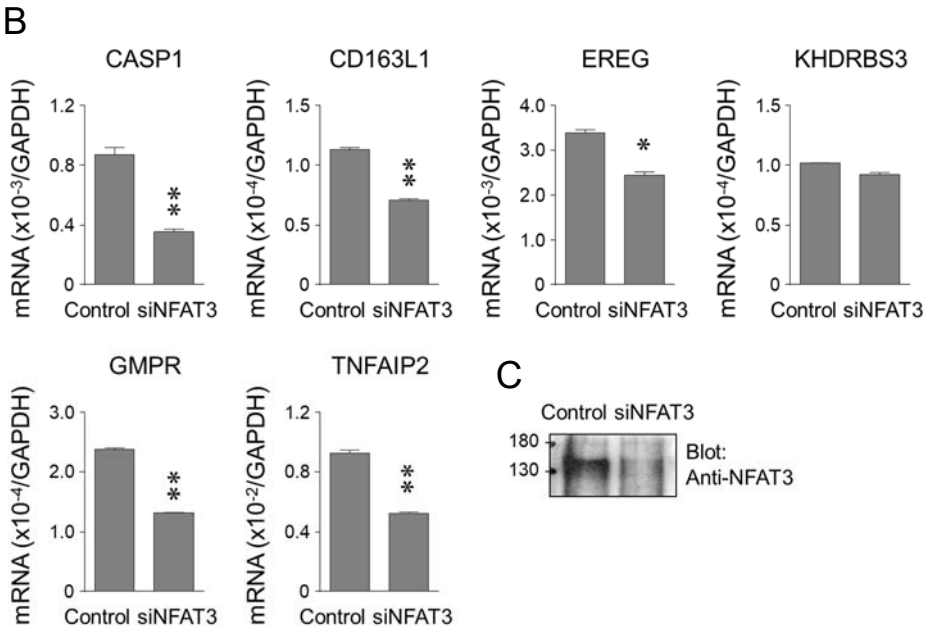
Supplementary Figure 3: Knockdown effects of NFAT3 on binding activity of NFAT site in the IL-2 promoter

Jurkat-TAg cells were transfected with NFAT3 Stealth™ RNAi or its control oligo twice on day 0 and day 2. On day 4, cells were stimulated with 5 nM PMA and 1 μM ionomycin for 1 h, then nuclear extracts were analyzed by an EMSA using NFAT site in the IL-2 promoter. The results shown are representative of three separate experiments.

Fig. S4.

A

Gene symbol	Accession number	siNFAT3 / Control (Cy5/Cy3)	Control (Cy3)	siNFAT3 (Cy5)	siNFAT3 / Control (Cy3/Cy5)	siNFAT3 (Cy3)	Control (Cy5)	NFAT3 / Vector (Cy5/Cy3)	Vector (Cy3)	NFAT3 (Cy5)	NFAT3 / Vector (Cy3/Cy5)	NFAT3 (Cy3)	Vector (Cy5)
CCNA1	NM_003914	0.153	50	8	0.259	12	47	1.558	89	138	1.559	147	94
CASP1	NM_033292	0.388	1635	634	0.444	662	1489	1.679	1726	2898	1.911	3304	1729
TFEC	NM_012252	0.390	53	20	0.352	19	53	2.033	17	35	2.256	42	19
LEF1	NM_016269	0.412	46	19	0.387	18	46	3.159	12	37	2.332	42	18
BRCA2	NM_000059	0.472	41	19	0.512	20	39	1.791	23	41	2.105	48	23
UPP1	NM_001287426	0.476	211	101	0.452	98	218	1.672	534	892	1.518	915	603
CD163L1	NM_174941	0.479	257	123	0.533	118	222	1.701	71	120	1.526	126	83
BRCA2	NM_000059	0.480	42	20	0.519	22	42	1.791	23	41	2.105	48	23
USP30-AS1	NR_038996	0.483	66	32	0.484	28	57	1.661	689	1145	2.231	1458	654
MIR503HG	NR_024607	0.496	645	320	0.538	320	595	1.711	191	327	2.027	360	178
BATF2	NM_138456	0.522	151	79	0.621	80	129	1.515	3383	5124	1.741	5909	3394
TUFT1	NM_020127	0.537	3598	1931	0.659	1997	3029	1.348	1121	1511	1.702	1786	1050
TLR1	NM_003263	0.550	101	56	0.670	66	98	1.501	63	94	1.780	111	63
EREG	NM_001432	0.572	235	134	0.618	147	237	1.869	1381	2581	1.838	2894	1575
KHDRBS3	NM_006558	0.575	274	158	0.531	141	267	1.785	275	492	1.828	547	299
GMPR	NM_006877	0.615	409	251	0.688	241	350	1.414	1195	1690	1.571	1861	1185
NEDD1	NM_152905	0.641	3328	2132	0.688	2092	3039	1.483	2531	3753	1.505	4315	2866
TNFAIP2	NM_006291	0.751	8678	6520	0.634	5724	9030	1.960	15835	31035	1.809	34859	19269



Supplementary Figure 4: Contribution of NFAT3 to gene expression in ASMC

ASMC was transfected with NFAT3-expressing vector, NFAT3-specific Stealth™ RNAi oligo, or their control vector or oligo. At 48 h after transfection, the microarray analysis was performed. Genes that were downregulated by NFAT3 knockdown and were upregulated by NFAT3 overexpression are listed (A). The expression of CASP1, CD163L1, EREG, KHDRBS3, GMPR, and TNFAIP2 mRNA was determined by quantitative real-time RT-PCR (n = 4) (B). The expression of NFAT3 proteins was analyzed by immunoblotting of whole cell lysates with anti-NFAT3 Ab (C). The results shown are representative of at least two separate experiments. *P < 0.05, **P < 0.01, compared with control oligo-transfected control.