

**C**

MOTIF	SPECIES
←	
380 <u>PEEPKPK</u> 386	Mus musculus
376 <u>PEEPKPK</u> 382	Homo sapiens
376 <u>PEEPKPK</u> 382	Pan troglodytes
376 <u>PEEPKPK</u> 382	Macaca mulatta
379 <u>PEEPKPK</u> 385	Rattus norvegicus
374 <u>PEEPKPK</u> 380	Sus scrofa
374 <u>PEEPKPK</u> 380	Bos taurus
374 <u>PEEPKPK</u> 380	Ovis aries
304 <u>PEESKPK</u> 310	Xenopus tropicalis
326 <u>PEDSKPK</u> 332	Salmo salar
306 <u>PEDSKPK</u> 312	Danio rerio

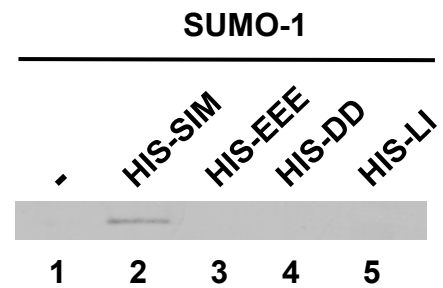
Supplemental Figure 1

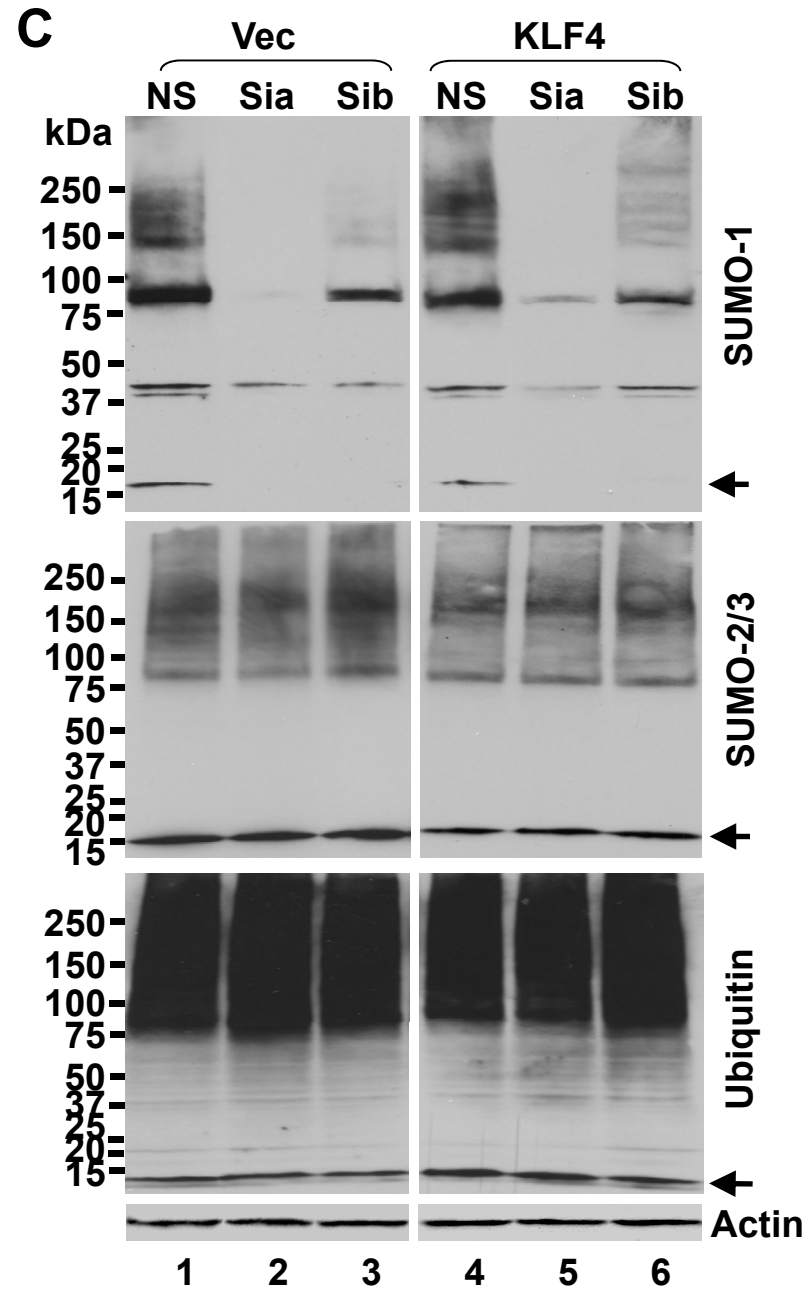
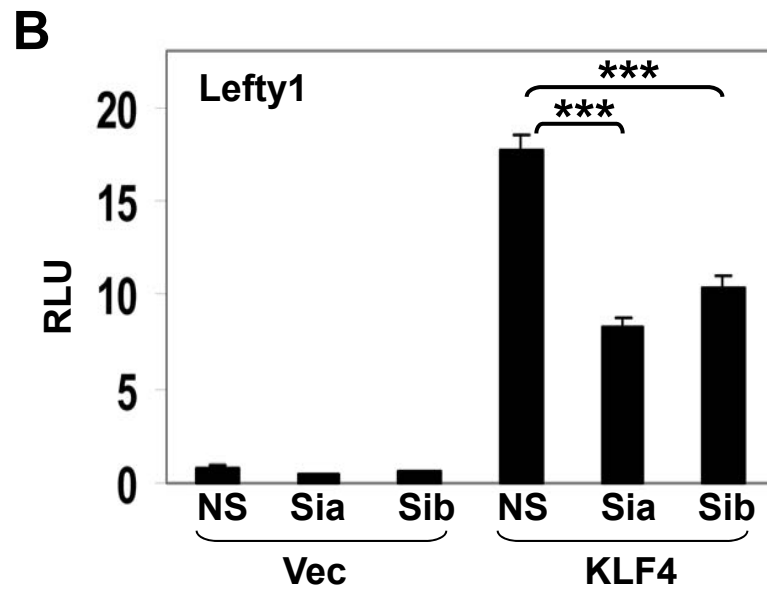
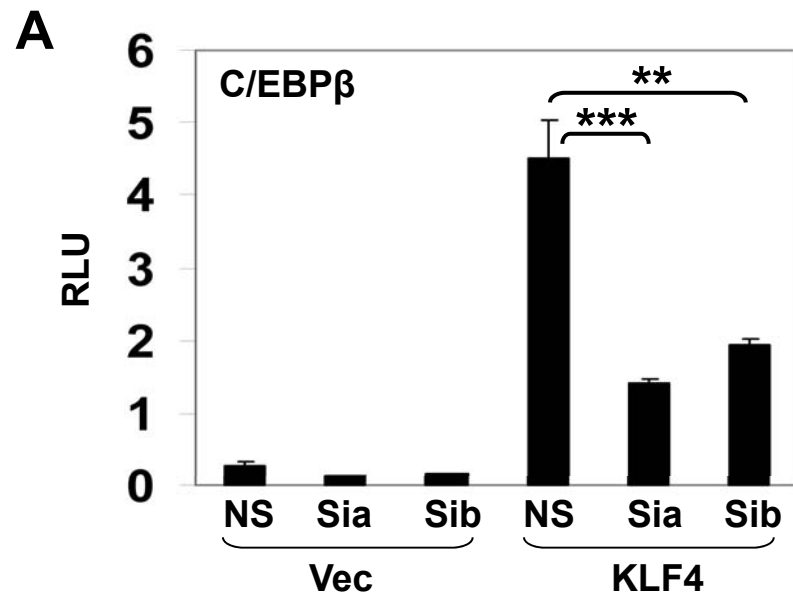
KLF4 SIM	RETEEFNDLLDLDFILSNS
TDG SIM1	PDILTFNLDIVIIGINPGL
TDG SIM2	KGIERNTDVQEVQYT
Sizn1 SIM2	DCNVIEIDDSPQDDS
Sizn1 SIM3	PQDDSDVDVILVEPED
RanBP2 SIM	DDVLIYEL
Daxx SIM	DPEEIVLSDSD
PML SIM	ASGAGEAEERVVVISSSEDSDA
CENP-E SIM	EEFETSENMAII
CoREST1 SIM	RERESEDELEEANGNNPIDIEVDQN
CoREST1 SIM	RERESEDELEEANGNNPIDIEVDQN

**A**

HIS-SIM (H)<sub>6</sub> P R E T E E F N D L L D L D F I L S N S  
HIS-EEE (H)<sub>6</sub> P R A T A A F N D L L D L D F I L S N S  
HIS-DD (H)<sub>6</sub> P R E T E E F N D L L A L A F I L S N S  
HIS-LI (H)<sub>6</sub> P R E T E E F N D L A D L D F A L S N S

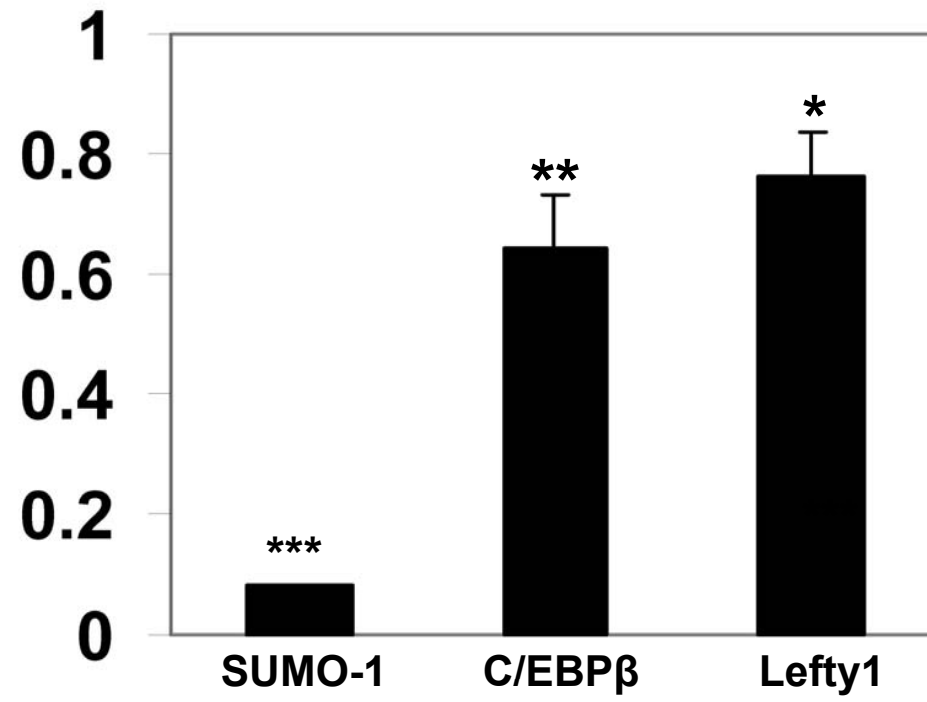
**B**





Supplemental Figure 4

**Relative mRNA Levels  
SUMO-1 siRNA/Non-specific siRNA**



Supplemental Figure 5

# A

**KLF4: RETEEFNLLDLDFILSNS**  
**VP16: DALDDFDLML**  
**AH: ELQELQELQALLQQQ**  
**PPAR $\alpha$ : EADDLESPLSEEFLQEMGNIQEISQSIGEE**  
**Pho4: DSLALDDLDRAFELVEGMDMDWMMP**  
**AvrXa10: VMWEQDAAPFAGAADDFFPAFNEEELAWLMELLPQ**  
**v-Myb: TDEDPEKEKRIKELELLLMSTENEL**

**B**

v-Myb: TDEDPEKEKRIKELELLLMSTENEL

VP16: DALDDFDLDMML

AH: ELQELQELQALLQQQ

AH: ELQELQELQALLQQQ

TDG SIM2: KGIERNTDVQEVQYT

VP16: LMDLDFDDLAD

TDG SIM2: KGIERNTDVQEVQYT

PPAR $\alpha$ : EADDLESPLSEEF LQEMGNIQEISQSIGEE

TDG SIM2: KGIERNTDVQEVQYT

Pho4: DSLALDDLDRAFELVEGMDMDWMMP

TDG SIM2: KGIERNTDVQEVQYT

AvrXa10: EQDAAPFAGAADDFFAPFNEEELAWLMELLPQ

TDG SIM2: KGIERNTDVQEVQYT

v-Myb: TDEDPEKEKR I KELE LLLMSTENEL

TDG SIM2: KGIERNTDVQEVQYT

v-Myb: TDEDPEKEKR I KELE LLLMSTENEL

Hannich *et al.* K-X<sub>3-5</sub>-I/V-I/L-I/L-X<sub>3-5</sub>-D/E/Q/N-D/E-D/E

v-Myb: TDEDPEKEKRIKELELLLMSTENEL

CoREST1 SIM: RERESEDELEEANGNNPIDI EVDQN