SUPPLEMENTAL FIGURE AND TABLE LEGENDS

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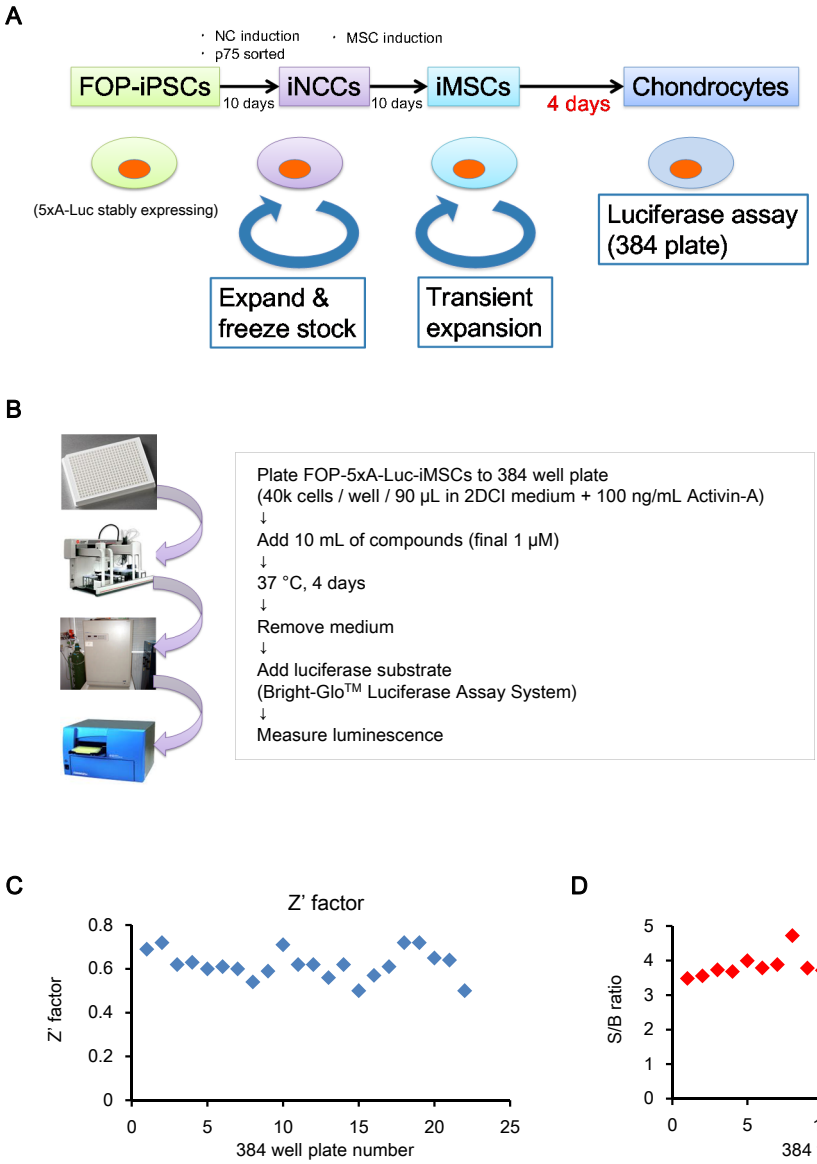

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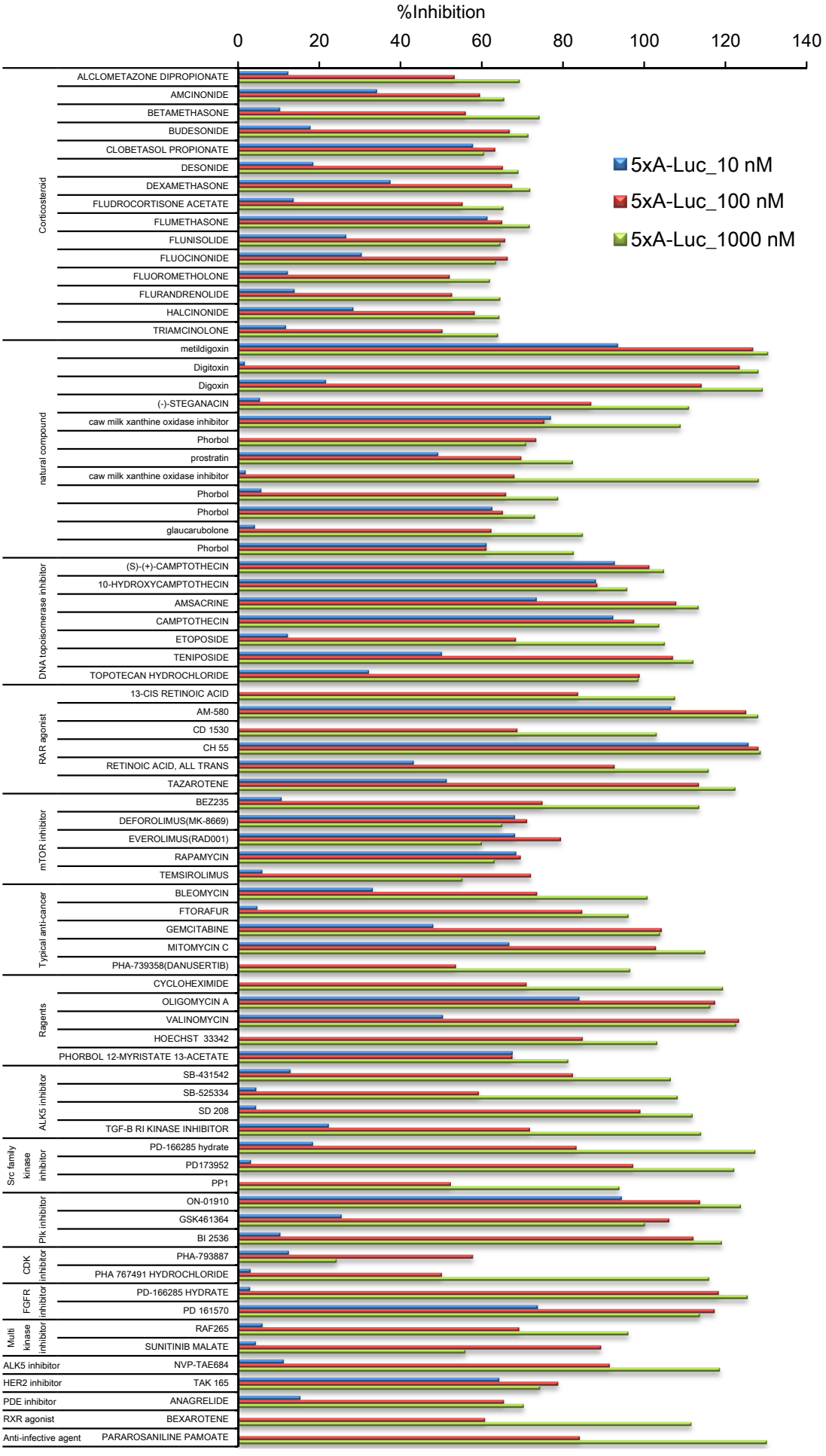

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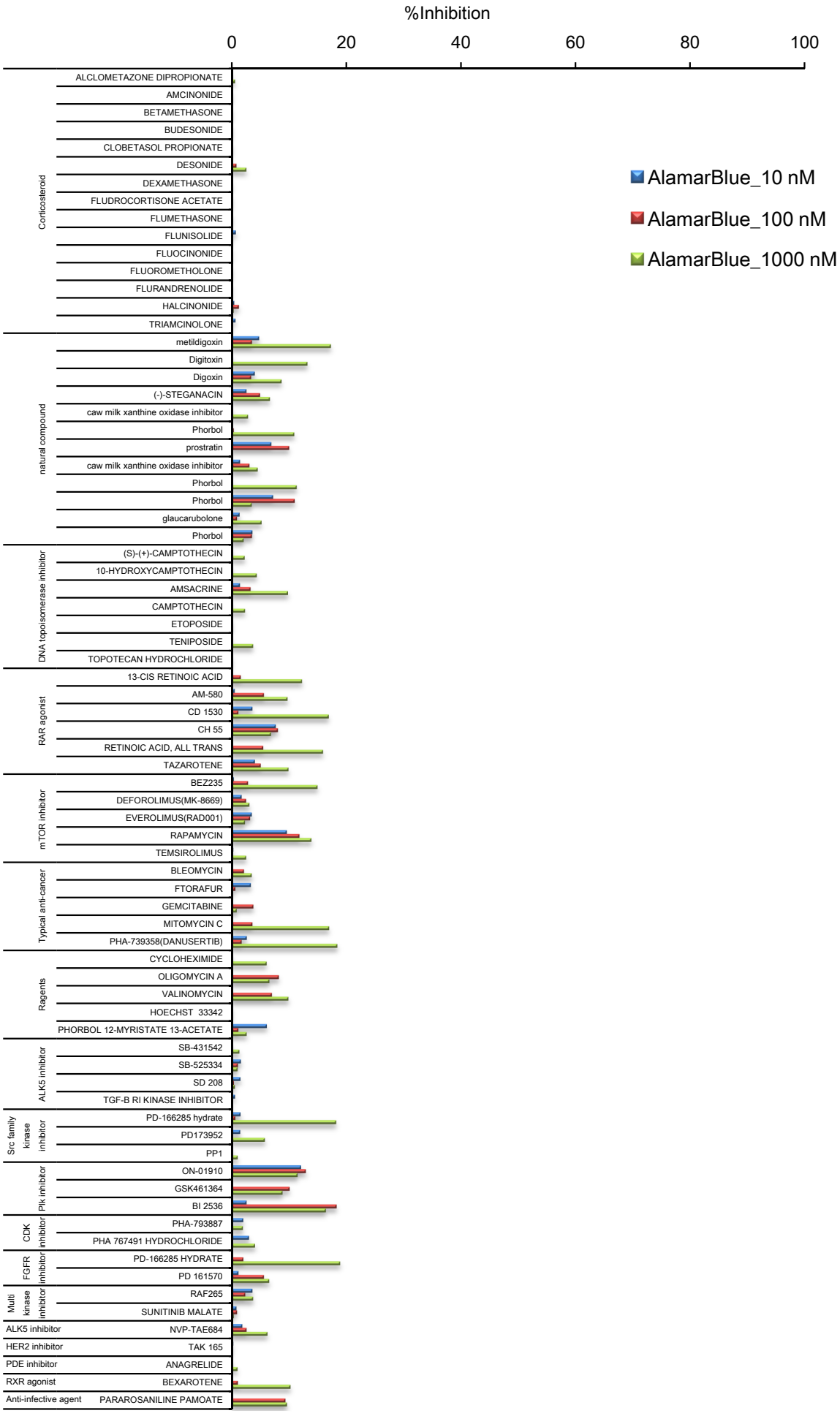

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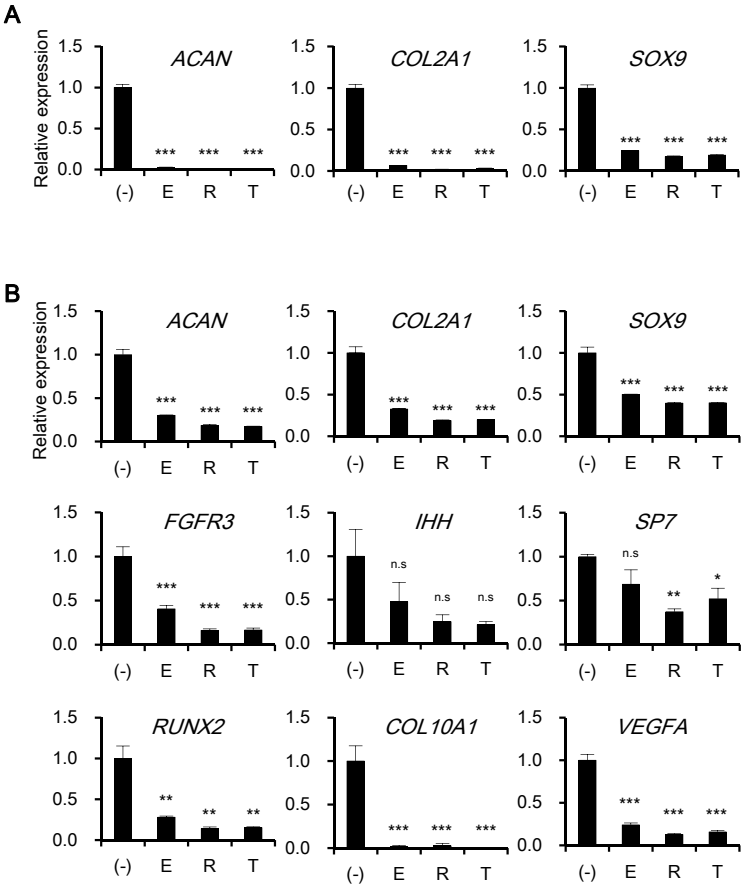

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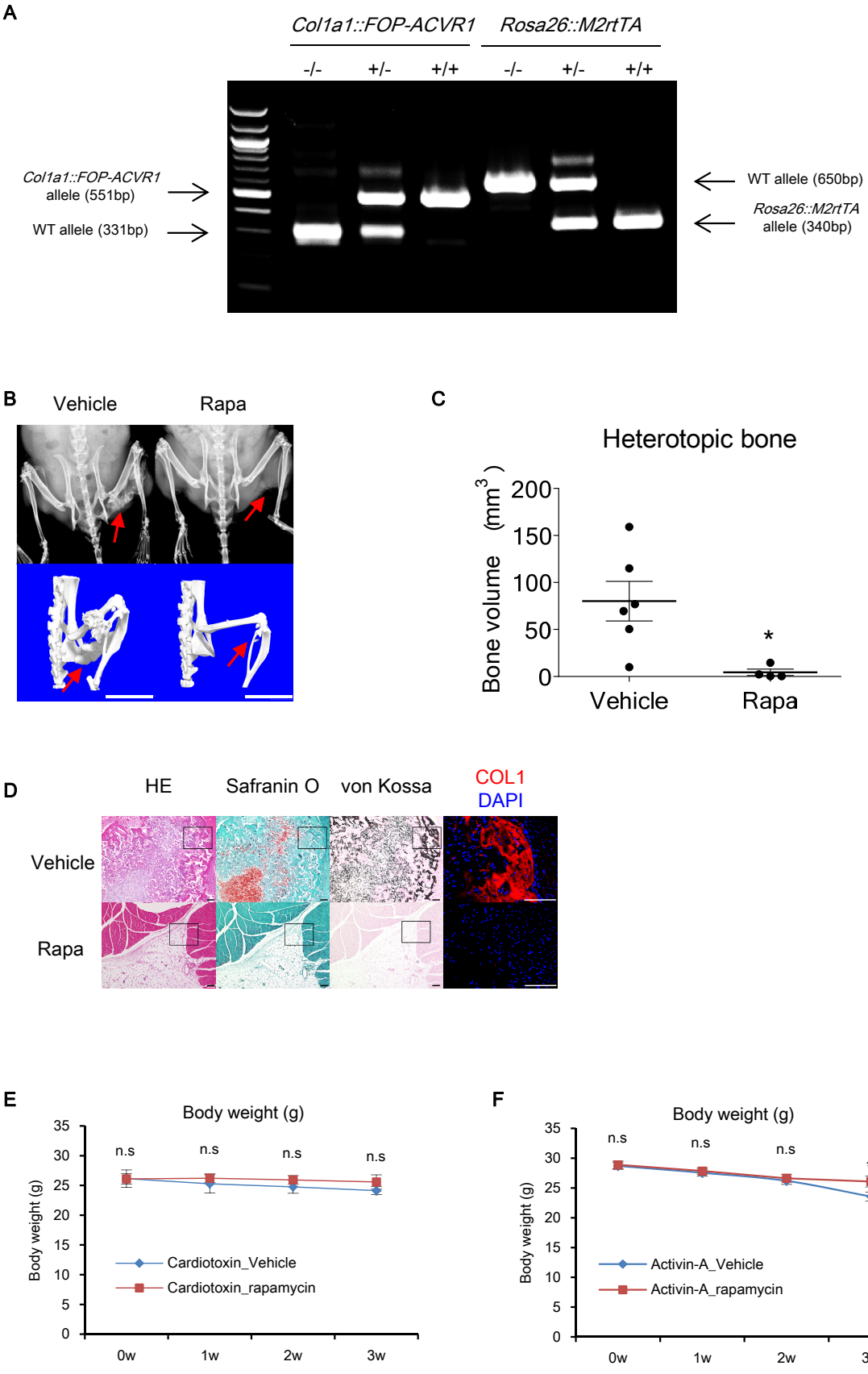

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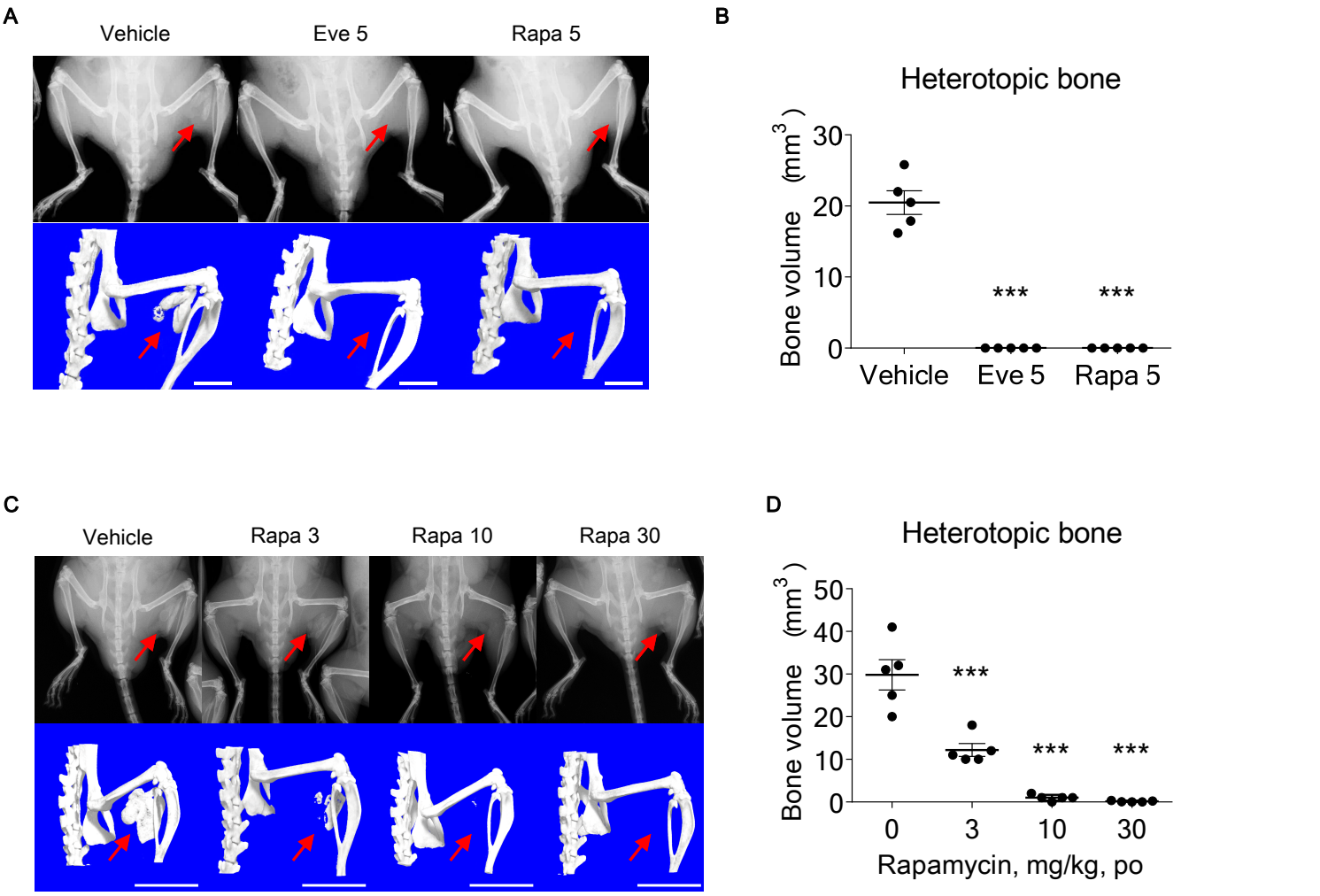

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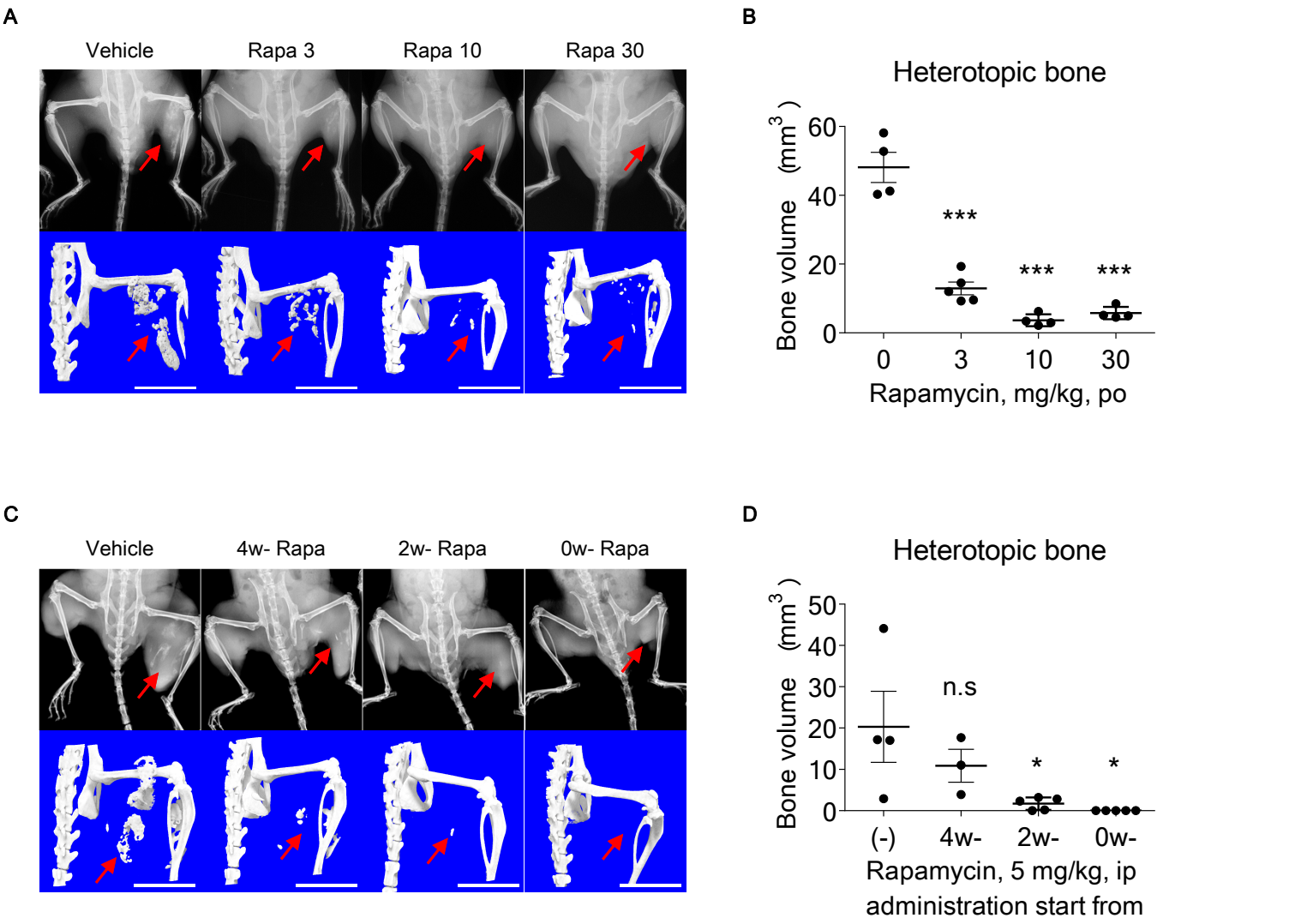

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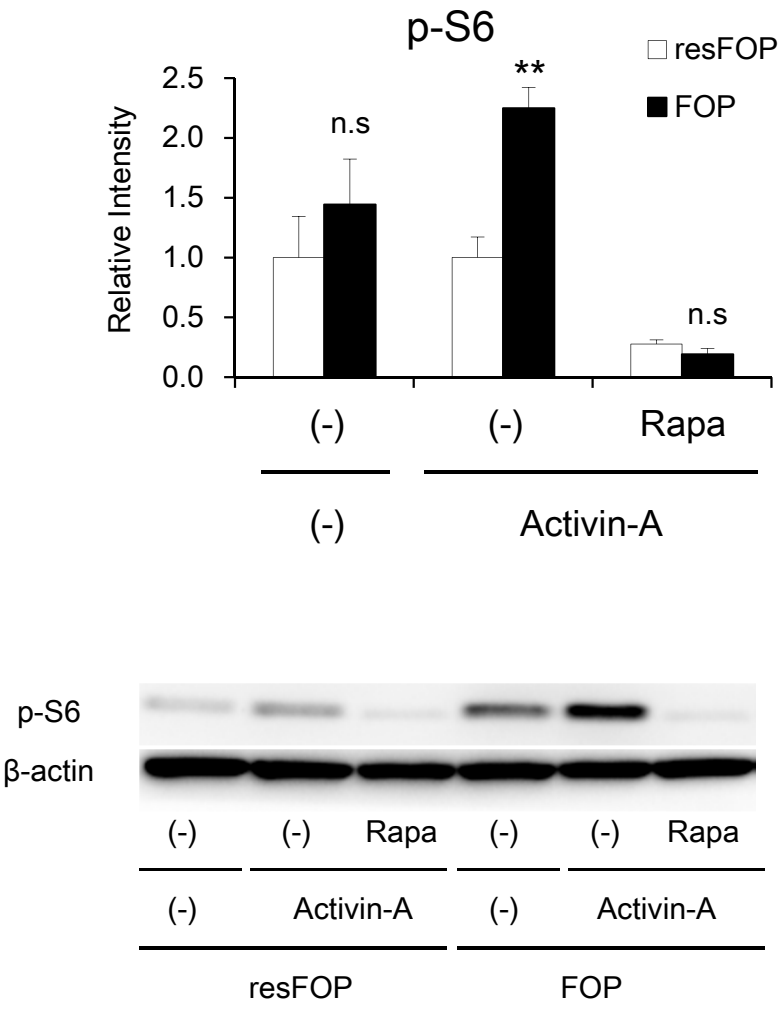

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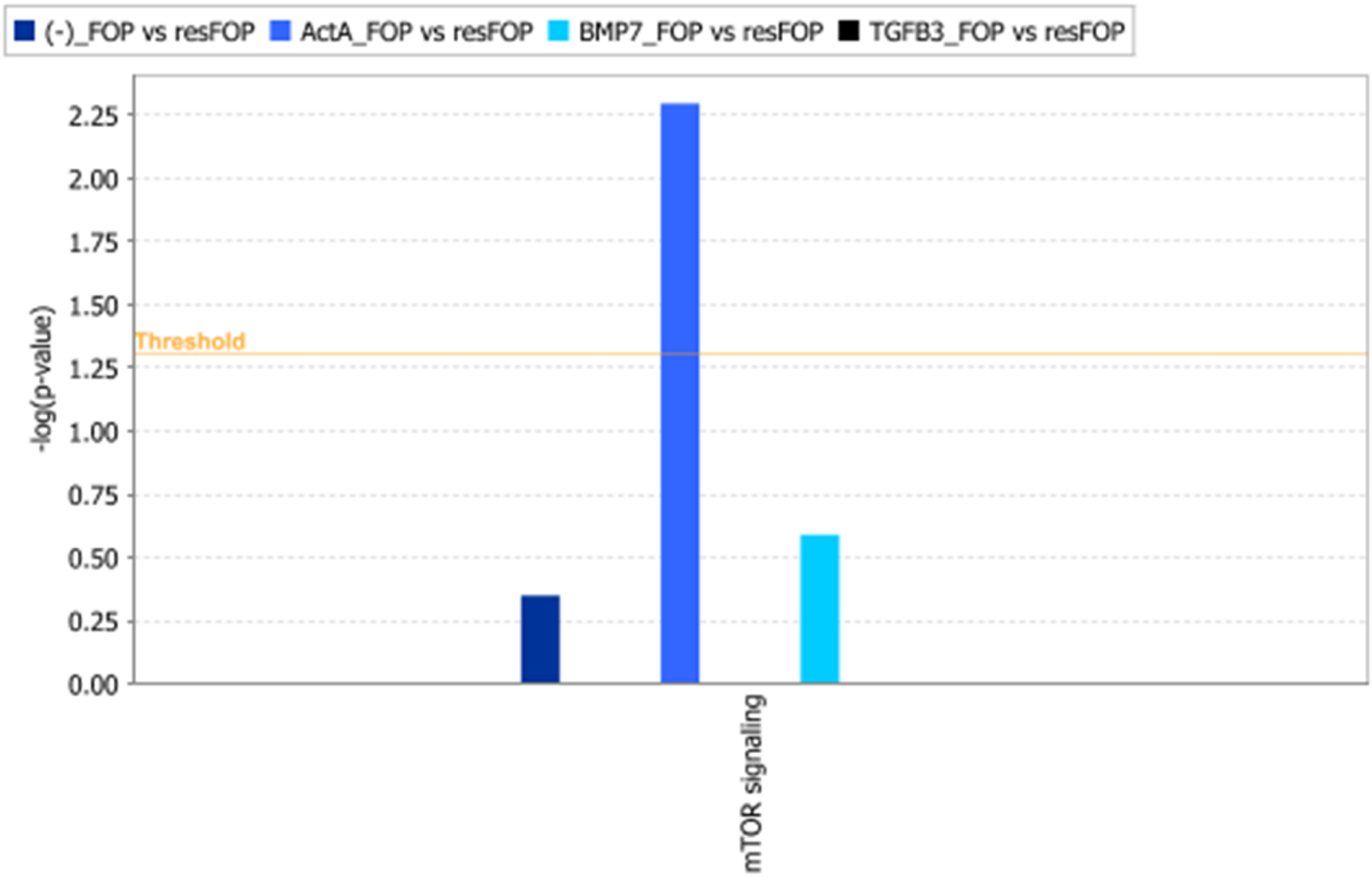
Comparison Analysis: 24h_FOPvsresFOP_1.5FC



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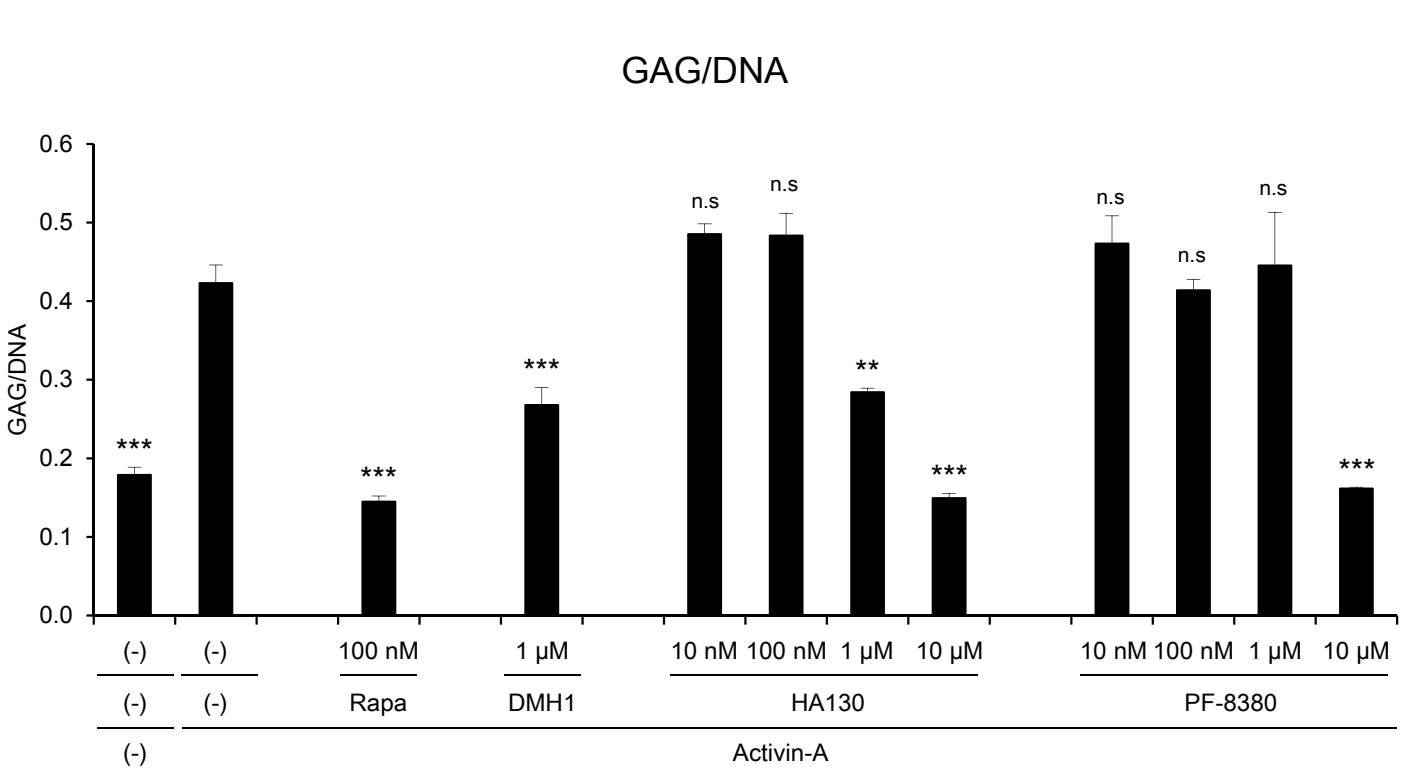

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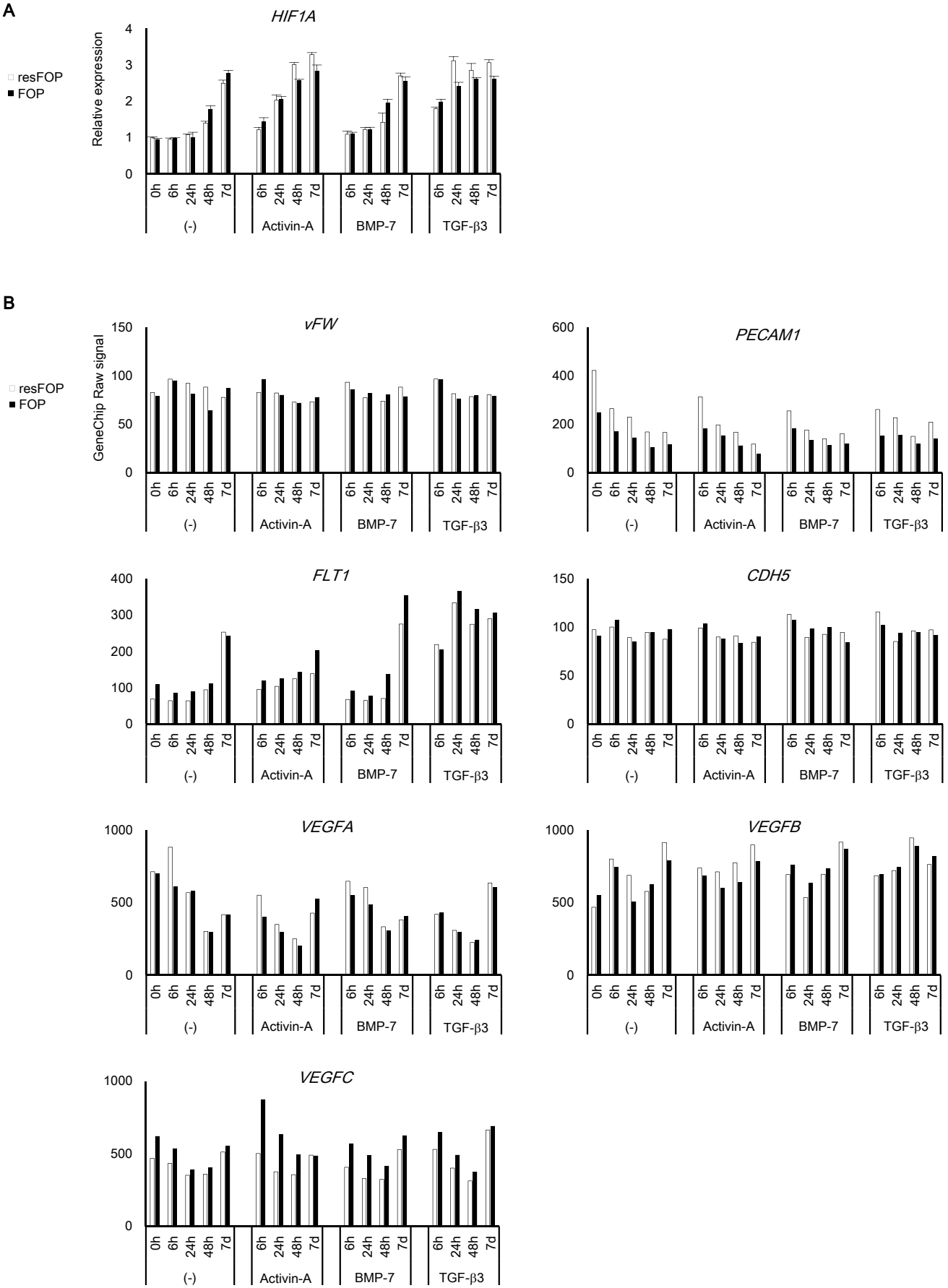

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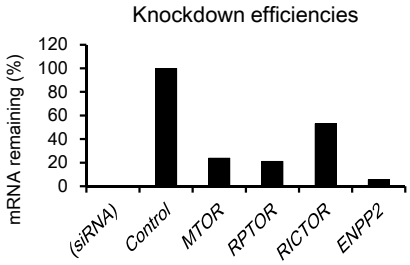

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Compound	# of HO (> 20 mm^3)
Vehicle	5/6
Rapa	0/4

Supplemental Table 2. The number of mice harboring HO (> 15 mm^3 bone volume) in C57BL/6 triggered by BMP-7, related to Supplemental Figure 6, A and B. BMP-7 was injected into the right gastrocnemius muscle of male C57BL/6 mice (6-8w), who were administered drugs once daily intraperitoneally for 2 weeks thereafter.

Compound	# of HO (> 15 mm^3)
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Eve 5	0/5
Rapa 5	0/5

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Compound	# of HO (> 15 mm^3)
Vehicle	5/5
Rapa 3	1/5
Rapa 10	0/5
Rapa 30	0/5

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Compound	# of HO (> 20 mm^3)
Vehicle	4/4
Rapa 3	0/5
Rapa 10	0/4
Rapa 30	0/4

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Compound	# of HO (> 15 mm^3)
Vehicle	3/4
4w- Rapa	1/3
2w- Rapa	0/5
0w- Rapa	0/5

Supplemental Table 6. siRNA sequences, related to Supplemental Figure 12.

Gene	siRNA ID	Sense	Antisense
MTOR	s604	GGAGCCUUGUUGAUCCUUAtt	UAAGGAUCAACAAGGCUCCat
RPTOR	s33215	GCAUUGGACUUGCUUGGAAtt	UUCCAAGCAAGUCCAAUGCtc
RICTOR	s48409	CACUUACUACUUACCGGAAtt	UUCCGGUAAGUAGUAAGUGct
ENPP2	s10267	CCAACUCACUACUACAGCAtt	UGCUGUAGUAGUGAGUUGGaa

Supplemental Table 7. Primers for RT-qPCR.

Gene	Forward	Reverse
ACTB	CACCATTGGCAATGAGCGGTTC	AGGTCTTTGCGGATGTCCACGT
ACAN	TCGAGGACAGCGAGGCC	TCGAGGGTGTAGCGTGTAGAGA
COL2	GGCAATAGCAGGTTCACGTACA	CGATAACAGTCTTGCCCCACTT
SOX9	GACTTCCGCGACGTGGAC	GTTGGGCGGCAGGTACTG
FGFR3	AGTACCTGGACCTGTCGGC	CCTCACATTGTTGGGGACCA
COL10A1	CCCAGCACGCAGAATCCATC	AGTGGGCCTTTTATGCCTGT
VEGFA	CAATCGAGACCCTGGTGGAC	TCTCTCCTATGTGCTGGCCT
MTOR	GACGAGAGATCATCCGCCAG	ACAAGGGACCGCACCATAAG
RPTOR	CGGCTGACCTATTCACCTCC	CAGGCACCAGACTGACACAT
RICTOR	GGGGTGTCTCAAGAAGGCTC	GCGAAGGAGTATACGGCACA
ENPP2	CCAACCATGCCAGAGGAAGT	ATCATCACAAGTGCAGCCCA
HIF1A	TGTAATGCTCCCCTCACCCA	TGCAGGGTCAGCACTACTTC

Supplemental Table 8. Antibodies for western blotting and immunostaining.

	Name	Company	Cat. No	Concentration
1st antibody	Phospho-Smad1 (Ser463/465)/ Smad5 (Ser463/465) / Smad9 (Ser465/467) (D5B10) Rabbit mAb	Cell Signaling Technology	#13820	1:1000
	Smad1/5/8 Antibody (N-18)-R	Santa Cruz Biotechnology	sc-6031-R	1:1000
	Phospho-Smad2 (Ser465/467)/ Smad3 (Ser423/425) (D27F4) Rabbit mAb	Cell Signaling Technology	#8828	1:1000
	Smad2/3 (D7G7) XP® Rabbit mAb	Cell Signaling Technology	#8685	1:1000
	Phospho-S6 Ribosomal Protein (Ser235/236) Antibody	Cell Signaling Technology	#2211	1:1000
	Monoclonal Anti-b-Actin-Peroxidase clone AC-15	SIGMA-ALDRICH	A3854	1:200000
	Anti-human Vimentin antibody	Abcam	ab16700	1:40
	Collagen I Antibody	Novus Biologicals	NB600-408	1:100
2nd antibody	Anti-rabbit IgG, HRP-linked Antibody	Cell Signaling Technology	#7074	1:10000
	Goat anti-Rabbit IgG (H+L) Secondary Antibody, Alexa Fluor® 488 conjugate	Invitrogen	A-11008	1:100
	Goat anti-Rabbit IgG (H+L) Secondary Antibody, Alexa Fluor® 555 conjugate	Invitrogen	A-21428	1:500