

Table S1. Antibodies used for immunoblotting.

Target	Catalog #	Dilution
pErk1/2	CST 9101	1:2000
Erk1/2	CST 4965	1:2000
pAkt (S473)	CST 4060	1:1000
Akt	CST 9272	1:1000
Cyclin D1	CST 2978	1:1000
Cyclin E1	CST 20808	1:1000
Cyclin B1	CST 4138	1:1000
p19Arf	sc-32748	1:500
p53	CST 2524	1:1000
p21Waf1/Cip1	sc-397	1:1000
HSP90	CST 4877	1:2000
ROCK1 (H-85)	sc-5560	1:500
ROCK2 (C-20)	sc-1891	1:500
I κ B ζ	Invitrogen #14-6801-82	1:1000
p65	CST 8242	1:1000
Lamin A/C	CST 4777	1:1000
K1	BioLegend #905201	1:2000
K10	BioLegend #905404	1:1000
K14	BioLegend #905304	1:10000
β -Actin	CST 4970	1:1000
Histone H3	ab17921	1:10000
Smad3	CST 9523	1:1000
p-Smad3	CST 9520	1:1000

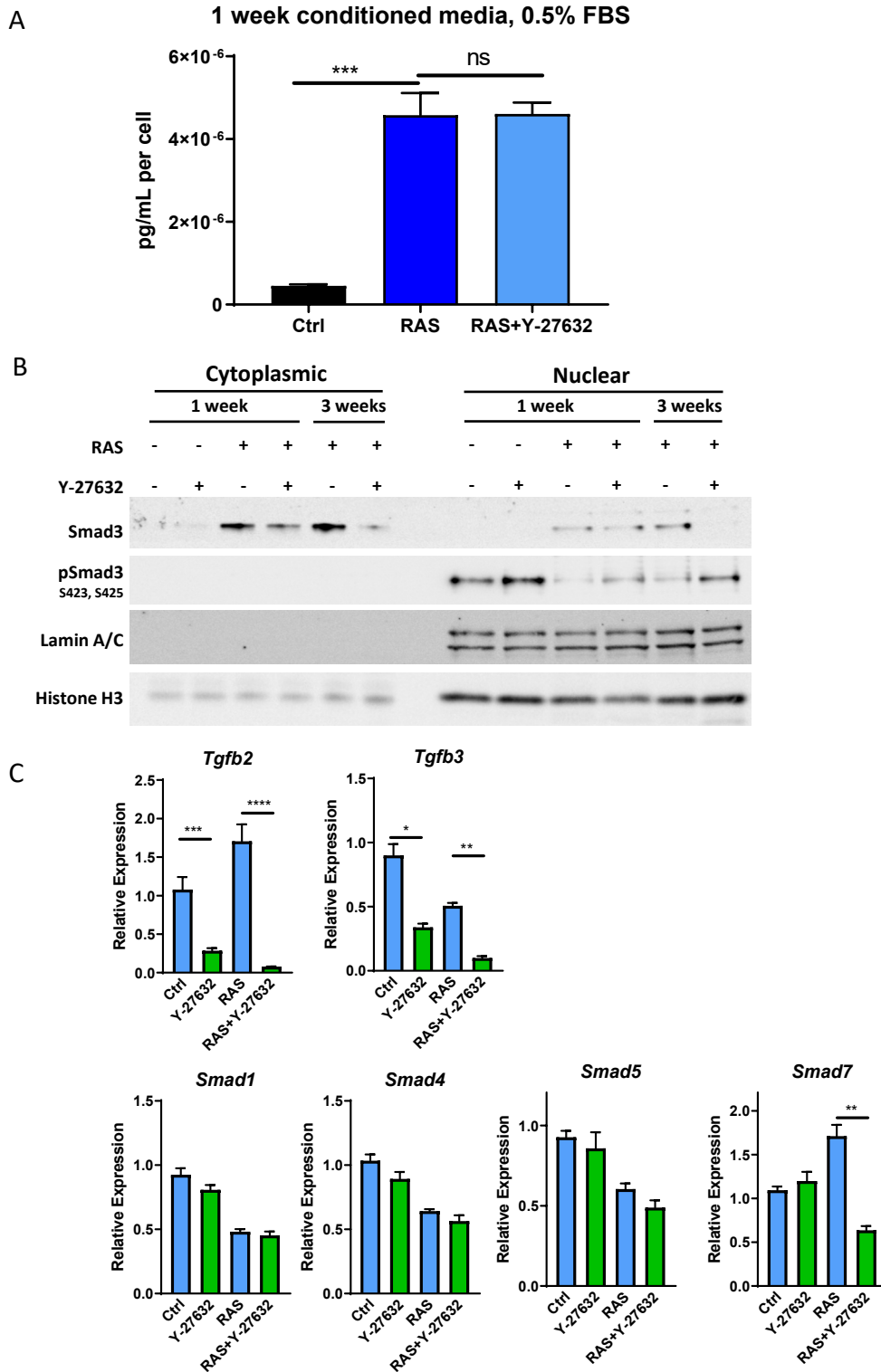
Table S2. Sequences of custom primers for quantitative reverse transcription polymerase chain reaction (qRT-PCR).

Gene	Forward	Reverse
<i>Gapdh</i>	CATGGCCTTCCGTGTTCTTA	GCGGCACGTCAGATCCA
<i>Cdkn2b</i> (p15 ^{Ink4b})	CCCTGCCACCTTACCAGA	CAGATACCTCGCAATGTCACG
<i>Il1a</i>	CAAAGTATGAAGCTCGTCA	TCTCCTTGAGCGCTCACGAA
<i>Csf2</i>	GCCATCAAAGAAGCCCTGAA	GCGGGTCTGCACACATGTTA
<i>Csf3</i>	TCTGCCCCGAAGCTTCTGCTTAAG	CAGCAACACCAGCTCCTCGGGGTGA

Table S3. Data from cytokine array analysis.

	Ras1/C1	Ras3/C1	Ras3/C3	RasY1/Ras1	RasY3/Ras3
Pro-MMP-9	10.76	15.01	7.50	0.58	0.16
GM-CSF	7.02	10.22	17.12	0.26	0.45
Thymus CK-1	6.59	10.39	6.00	0.55	0.73
Decorin	5.94	7.47	1.50	1.22	0.72
KC	4.51	5.98	4.76	0.81	0.88
MIP-1-gamma	3.77	2.55	0.57	0.98	0.89
IL3	3.34	5.03	6.91	0.39	0.27
MIP-3-alpha	2.85	1.55	4.46	0.89	1.77
IGFBP-2	2.60	1.66	1.64	1.08	1.75
MMP-2	2.45	3.22	5.63	1.27	0.54
MMP-3	2.24	5.40	7.36	1.10	0.67
LIX	2.20	3.09	2.27	0.78	0.78
G-CSF	2.17	3.41	4.46	0.58	0.38
IGF-BP-3	1.96	2.33	2.85	0.95	0.79
CXCL16	1.85	1.81	3.83	0.89	0.97
Galectin-1	1.70	1.66	2.21	0.67	0.49
Osteoprotegerin	1.48	1.75	2.10	0.87	0.27
Osteopontin	1.40	3.32	4.55	1.04	0.58
TSLP	1.29	1.65	2.99	0.92	1.64
MDC	1.18	1.73	1.41	1.31	0.70
GITR	1.16	2.19	1.36	1.16	0.70
E-Selectin	1.16	1.73	1.07	1.16	0.70
TWEAK R	1.13	2.91	4.81	0.35	0.16
VEGF R2	1.12	1.73	1.11	1.40	0.44
E-Cadherin	1.06	1.44	2.15	1.04	1.63
MCP-1	0.93	2.77	2.20	1.64	0.49
sTNF RII	0.66	0.34	0.89	1.16	0.94
MIP-1-alpha	0.64	0.32	0.89	1.04	1.25
SDF-1-alpha	0.59	0.39	1.02	1.52	0.71
TARC	0.58	0.55	1.49	1.80	0.56

Proteins released by keratinocytes in cell culture supernatant were detected using Cytokine Arrays from Ray Bioscience. Proteins sorted by most increased by RAS to most decreased by RAS and how those proteins are affected by Y-27632 treatment on RAS-keratinocytes. Data presented are ratios between the two groups. Protein names colored in blue indicate reported SASPs. C are control keratinocytes. Numbers in the headings indicate weeks of treatment.



Supplemental figure S1 (A) TGF- β 1 ELISA. Supernatants from one-week cultured cells were collected and analyzed for TGF- β using an Elisa kit from R&D. Results were normalized by total cell count as determined by Hoechst staining. (B) Immunoblotting for Smad3 and phospho-Smad3 in subcellular compartments of keratinocytes. (C) RT-qPCR analysis of TGF- β regulated genes from one-week cultured keratinocytes treated as shown. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.005$, **** $p < 0.001$