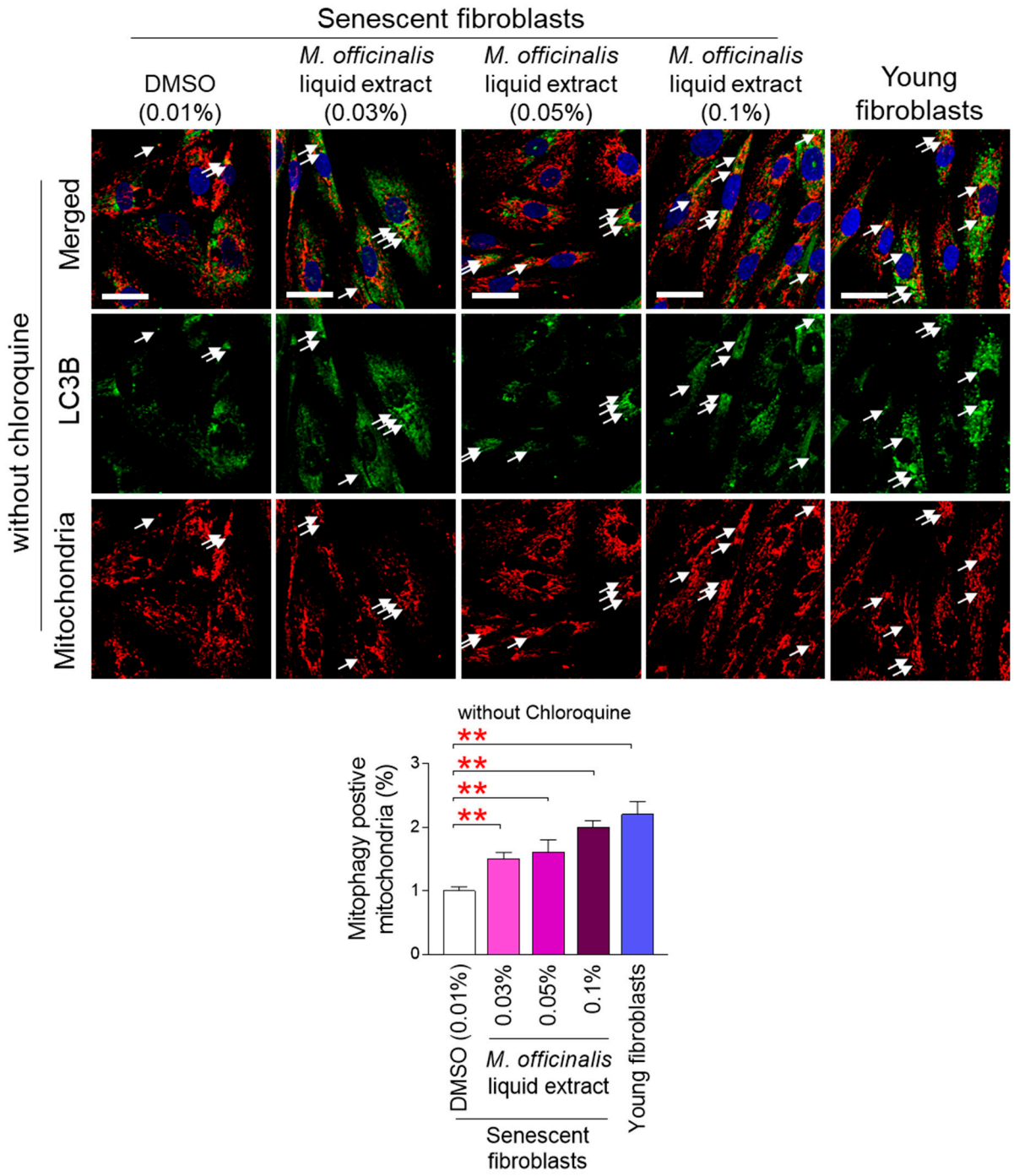

Figure S1. Immunostaining for LC3B (green) and mitochondria (red). Senescent fibroblasts were treated with DMSO (0.01%) or *M. officinalis* liquid extract (0.03%, 0.05% and 0.1%) every 4 days for 12 days. Young fibroblasts were used as a positive control. A total of 20 μM chloroquine was not added to cells 24 h before immunofluorescence staining. Scale bar 10 μm. Mitophagy is indicated by a white arrow. $^{**}P < 0.01$, Student's t–test. Mean ± S.D., $n = 3$.

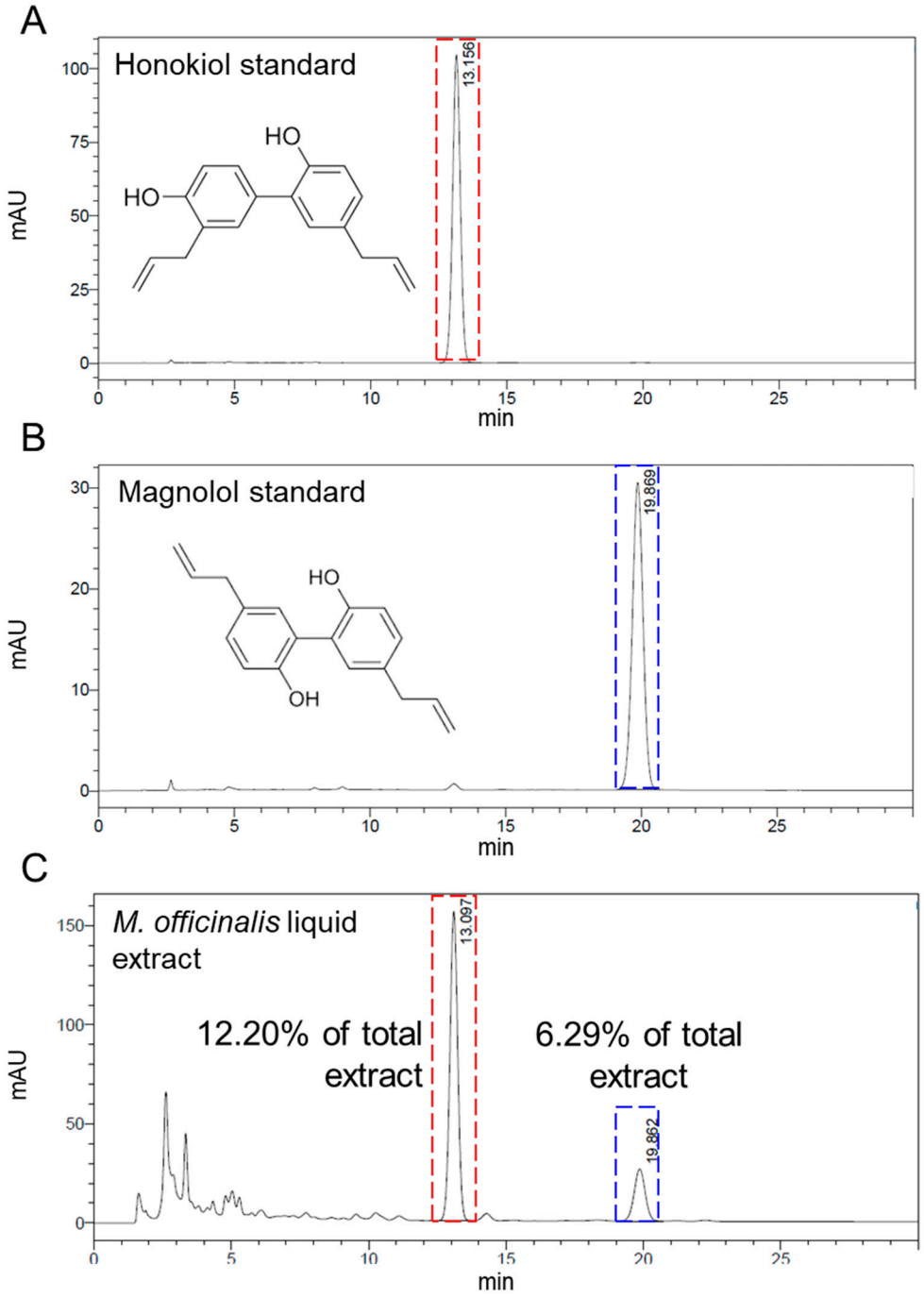

Figure S2. Identification of honokiol and magnolol from *M. officinalis* liquid extracts. High-performance liquid chromatography (HPLC) was implemented to ascertain the quantity of honokiol and magnolol in the *M. officinalis* liquid extract: (A) Honokiol standard peak using HPLC (red dotted box). (B) Magnolol standard peak using HPLC (blue dotted box). (C) The honokiol standard was matched by the HPLC peak of the *M. officinalis* liquid extract, which contained 12.20% honokiol. The magnolol standard was matched by the HPLC peak of the *M. officinalis* liquid extract, which accounted for 6.29% of the total extract.

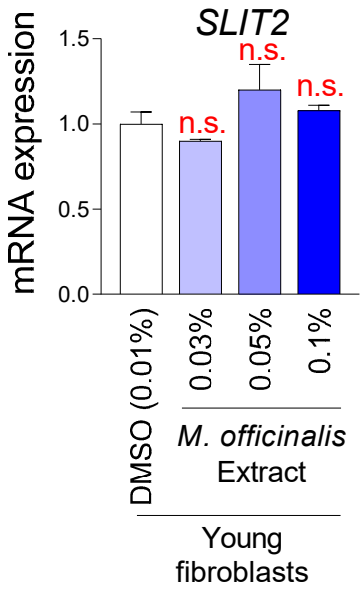

Figure S3. *SLIT2* expression was assessed in young fibroblasts treated with DMSO (0.01%) or *M. officinalis* liquid extract (0.03%, 0.05% and 0.1%) every 4 days for 12 days. n.s. (not significant), Student's t-test. Mean ± S.D., $n = 3$.

Table S1. Details for graphs shown in Figure 5 (mean, standard deviation, 95% confidence interval, sample size, and effect size).

Parameter	Group	Time point	Mean	Standard deviation	95% confidence intervals	Sample size	Effect size Cohen's d (using pooled standard deviation)
Neck wrinkle depth	Vehicle cream	Baseline	0.055429	0.0142849	0.049–0.062	21	0.32 a small effect size
		4 weeks	0.050952	0.0134070	0.045–0.057	21	
	Cream containing *M. officinalis* liquid extract (3%)	Baseline	0.055429	0.0135778	0.049–0.062	21	0.65 a modest magnitude of change
		4 weeks	0.047524	0.0106847	0.043–0.052	21	
Neck wrinkle maximum depth	Vehicle cream	Baseline	0.079381	0.0199311	0.070–0.088	21	0.22 a small effect size
		4 weeks	0.075143	0.0185992	0.067–0.084	21	
	Cream containing *M. officinalis* liquid extract (3%)	Baseline	0.086476	0.0229970	0.076–0.097	21	0.78 a moderate-to-large effect size
		4 weeks	0.071381	0.0148407	0.065–0.078	21	

Table S2. Details for graphs shown in Figure 6 (mean, standard deviation, 95% confidence interval, sample size, and effect size).

Parameter	Group	Time point	Mean	Standard deviation	95% confidence intervals	Sample size	Effect size Cohen's d (using pooled standard deviation)
Gross elasticity	Vehicle cream	Baseline	0.6728	0.04356	0.653–0.693	21	−0.08 a negligible effect size
		4 weeks	0.6764	0.04334	0.657–0.696	21	
	Cream containing *M. officinalis* liquid extract (3%)	Baseline	0.6681	0.04216	0.649–0.687	21	−0.59 a moderate effect size
		4 weeks	0.6932	0.04282	0.674–0.713	21	

Table S3. Details for graphs shown in Figure 7 (mean, standard deviation, 95% confidence interval, sample size, and effect size).

Parameter	Group	Time point	Mean	Standard deviation	95% confidence intervals	Sample size	Effect size Cohen's d (using pooled standard deviation)
Ra	Vehicle cream	Baseline	17.769048	5.7806582	Not applicable	21	0.035
		4 weeks	17.856667	5.3305847	Not applicable	21	
	Cream containing *M. officinalis* liquid extract (3%)	Baseline	17.871429	4.2775732	15.924–19.819	21	0.48 a moderate effect size
		4 weeks	16.068571	3.2430237	14.592–17.774	21	
Rq	Vehicle cream	Baseline	22.229048	7.2557018	Not applicable	21	0.055
		4 weeks	22.400952	6.8762896	Not applicable	21	
	Cream containing *M. officinalis* liquid extract (3%)	Baseline	22.341429	5.3304308	19.915–24.768	21	0.48 a moderate effect size
		4 weeks	20.070952	4.0195844	18.241–21.901	21	
Rmax	Vehicle cream	Baseline	130.160476	44.4263930	Not applicable	21	0.090
		4 weeks	132.007619	46.6397718	Not applicable	21	
	Cream containing *M. officinalis* liquid extract (3%)	Baseline	130.282857	31.9158816	115.755–144.811	21	0.50 a moderate effect size
		4 weeks	116.199048	24.0428453	105.255–127.143	21	

Table S4. Details for graphs shown in Figure 8 (mean, standard deviation, 95% confidence interval, sample size, and effect size).

Parameter	Group	Time point	Mean	Standard deviation	95% confidence intervals	Sample size	Effect size Cohen's d (using pooled standard deviation)
L*value	Vehicle cream	Baseline	63.490000	1.7407269	62.698–64.282	21	−0.07 a negligible effect size
		4 weeks	63.613810	1.7064392	62.837–64.391	21	
	Cream	Baseline	63.430000	1.9061506	62.562–64.298	21	−0.25

containing *officinalis* extract (3%)	*M.* liquid	4 weeks	63.906667	1.8881746	63.047–64.766	21	a moderate amount of change