

Table S1. Measurements of suspended particulates during smoke exposure.

	0.3 μm		0.5 μm		1.0 μm	
min	Average	SD	Average	SD	Average	SD
0	5.937.E+06	2.408.E+05	3.383.E+05	1.915.E+04	2.426.E+04	2.272.E+03
15	4.674.E+08	1.551.E+07	4.481.E+08	1.369.E+07	3.599.E+08	1.515.E+07
30	4.978.E+08	2.023.E+06	4.659.E+08	7.374.E+06	3.332.E+08	2.332.E+07
45	4.786.E+08	2.801.E+06	3.751.E+08	7.382.E+06	3.390.E+08	9.062.E+06
60	4.681.E+08	5.134.E+06	3.653.E+08	4.909.E+06	3.398.E+08	2.102.E+06

	2.0 μm		5.0 μm		10.0 μm	
min	Average	SD	Average	SD	Average	SD
0	2.238.E+04	2.353.E+03	0	0	0	0
15	3.563.E+08	1.545.E+07	2.466.E+05	1.949.E+05	1.126.E+04	1.380.E+03
30	3.282.E+08	2.376.E+07	1.237.E+04	1.540.E+03	2.120.E+03	9.349.E+02
45	2.988.E+08	5.981.E+07	1.979.E+05	1.164.E+05	1.084.E+04	1.471.E+03
60	2.999.E+08	5.693.E+07	1.085.E+04	1.153.E+03	5.791.E+03	3.789.E+02

The numbers of suspended particulates with indicated diameters were counted every 15 minutes after the initiation of cigarette burning, using an air particulate counter (MET ONE HHPC 6+). SD, standard deviation.

min	Average	SD
10	16.79	0.007
20	16.86	0.006
30	16.86	0.001
40	16.88	0.001
50	16.88	0.001
60	16.89	0.002

Concentrations of cigarette dusts (mg/m^3) were measured every 10 minutes after the initiation of cigarette burning, using a digital dust indicator (LD-5R). SD, standard deviation.

Figure S1

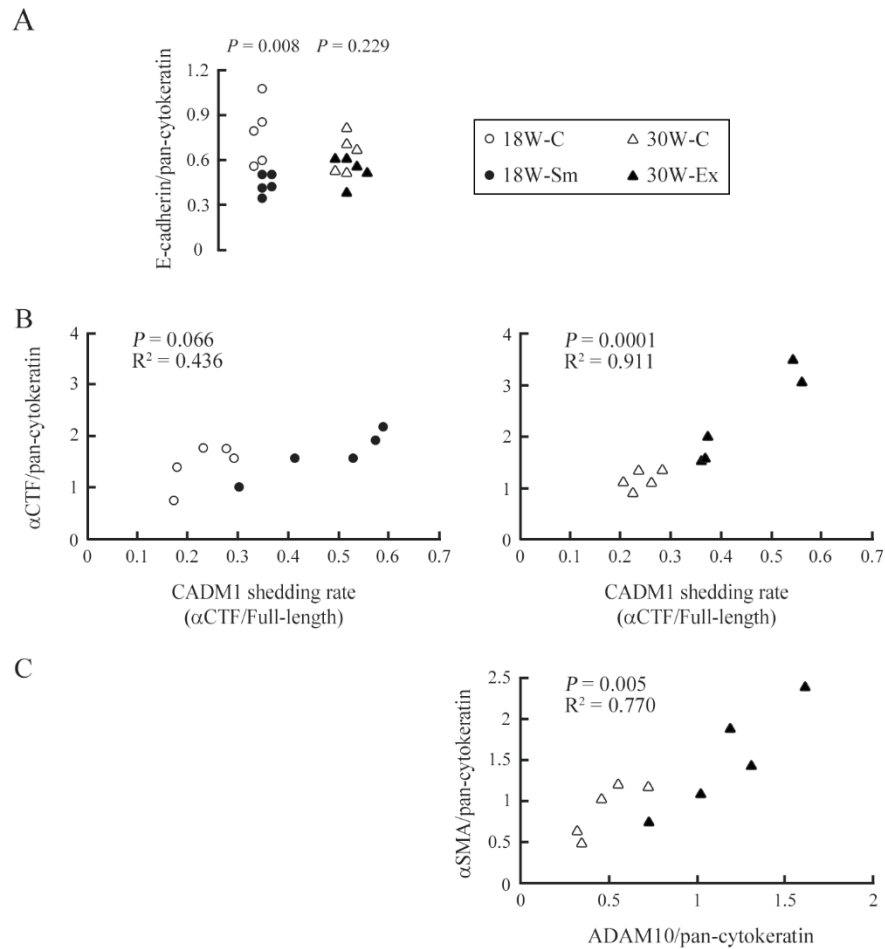


Figure S1. Statistical analyses of the expressions of CADM1 and related molecules.

(A) The E-cadherin levels per lung epithelial cell (relative to pan-cytokeratin) are plotted as dots in each of the four experimental groups. Statistical significance between the two groups of the same age was analyzed using paired Student's *t*-test. *P*-values are shown. (B) The αCTF level per epithelial cell is shown in the scatter plots with CADM1 shedding rate. Left, 18-week-old mice (*n* = 10); right, 30-week-old mice (*n* = 10). Correlations and statistical significance were analyzed using Spearman's rank test. *P*-values and *R*² are shown. (C) The αSMA level per epithelial cell (relative to pan-cytokeratin) is scatter plotted with the ADAM10 level per epithelial cell (30-week-old

mice, $n = 10$). Correlation and statistical significance were analyzed using Spearman's rank test. P -value and R^2 are shown.

Figure S2

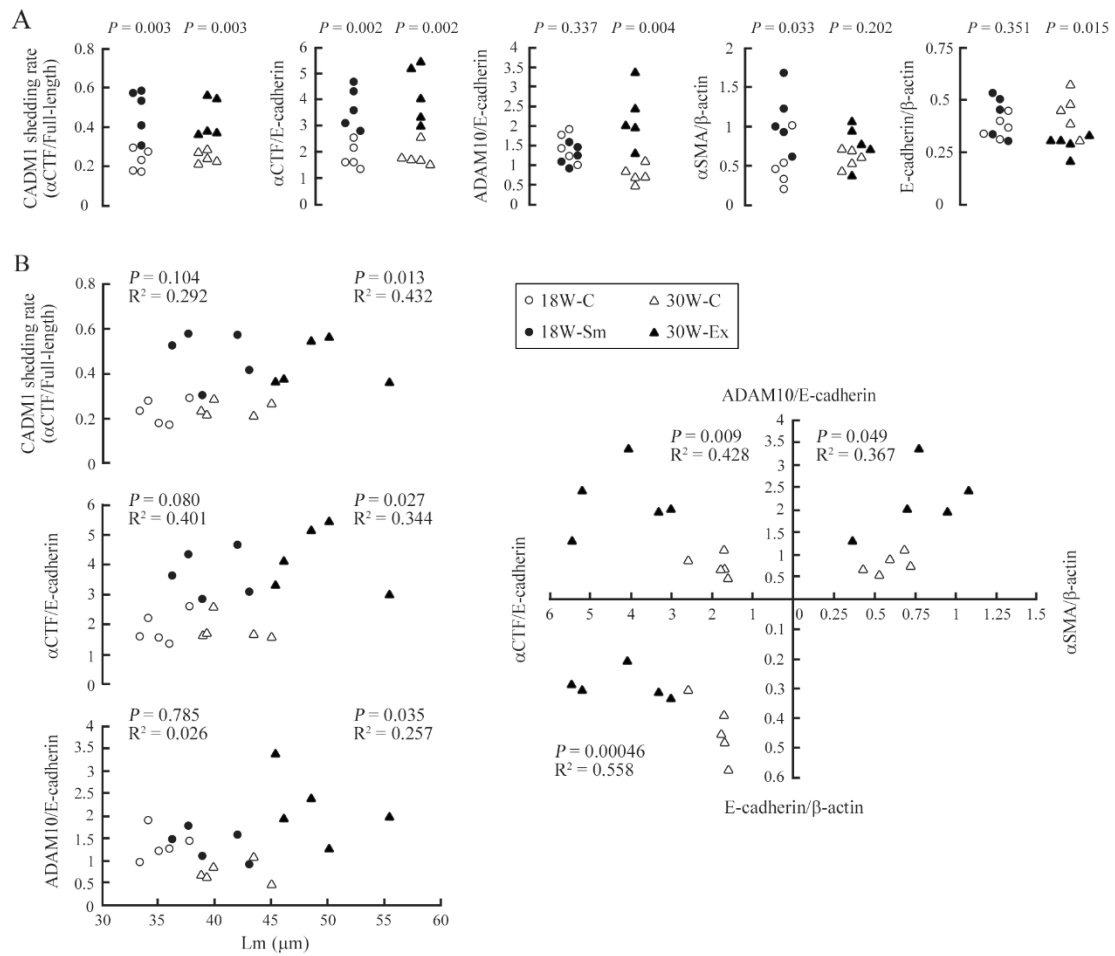


Figure S2. Statistical analyses of the expressions of CADM1 and related molecules using E-cadherin as an epithelial marker

(A) CADM1 ectodomain shedding rates (amount of α CTF relative to full-length CADM1), α CTF and ADAM10 levels per lung epithelial cell (relative to E-cadherin), and α SMA and E-cadherin levels per tissue (relative to β -actin) are plotted as dots in each group. Statistical significance between the two groups of the same age was analyzed using paired Student's *t*-test. *P*-values are shown. (B) The CADM1 shedding rate, α CTF level per epithelial cell, and ADAM10 level per tissue are shown in the upper three scatter plots with Lm. In the right graph, the α CTF and ADAM10 levels per

epithelial cell, and α SMA and E-cadherin levels per tissue are scatter plotted with each other. Correlations and statistical significance were analyzed using Spearman's rank test. P -values and R^2 are shown.