

Supplementary Table S1. Comparison between basal CONTROL, COVID-19 and H1N1 Groups according to immunohistochemical findings.

Data	CONTROL (N=11)	COVID-19 (N = 24)	H1N1 (N = 10)
<i>Anti-ACE-2¹</i>	2.14 (0.46-5.16)	9.76 (3.1-34.95)	3.07 (1.51-9.03)
	<0.0001*		0.0005**
<i>Anti-AKT-1¹</i>	0.31 (0.12-2.49)	1.39 (0.1-8.34)	0.85 (0.15-5.54)
	0.022*		0.249**
<i>Anti-Caveolin-1^{1,a}</i>	24.14 (16.87-28.76)	4.34 (0.23-16.34)	4.84 (1.6-12.46)
	<0.0001*		0.668**
<i>Anti-CD44v6¹</i>	0.27 (0.09-2.2)	7.89 (2.42-22.22)	0.09 (0.003-0.18)
	<0.0001*		<0.0001**
<i>Anti-IL-4¹</i>	2.11 (0.23-11.24)	17.49 (1.02-32.4)	1.35 (0.36-3.41)
	<0.0001*		<0.0001**
<i>Anti-MMP-9¹</i>	2.33 (0.46-8.62)	4.95 (1.86-18.42)	6.91 (3.33-22.8)
	0.004*		0.609**
<i>Anti-α-SMA¹</i>	0.39 (0.02-2.46)	7.46 (2.57-37.15)	0.57 (0.07-1.75)
	<0.0001*		<0.0001*
<i>Anti-Sphingosine-1¹</i>	4 (3-5)	6 (5-7)	5 (4-6)
	<0.0001*		0.063**
<i>Anti-TGF-β1¹</i>	1.13 (0.4-7.04)	2.97 (0.69-21.91)	3.18 (1.16-5.06)
	0.0315*		0.677**

Subtitle:¹ Median (Min-Max); ^a n=23; * = *p*-values obtained were compared between COVID-19 versus COTROL. ** = *p*-values obtained were compared between COVID-19 and H1N1 group; *p*-values were performed using the non-parametric Mann Whitney test (*p* <0,05).

Supplementary Table S2: Resource table

Antibody	Type	Clone/Code	Dilution	Source	Species Reactivity	RRID
Anti-ACE-2	Polyclonal/Rabbit	Ab272690	1:50	Abcam	Human ¹	*
Anti-AKT-1	Monoclonal/Rabbit	Y89	1:200	Abcam	Human ²	*
Anti-Caveolin-1	Monoclonal/Rabbit	EP353	1:200	BioSB	Human ³	*
Anti-CD44v6	Monoclonal/Mouse	VFF-7	1:200	Novocastra	Human ⁴	*
Anti-IL-4	Polyclonal/Rabbit	PA5-25165	1:200	Thermo Fisher	Human, Mouse ⁵	AB_2542665
Anti-MMP-9	Monoclonal/Rabbit	EP1254	1:200	Abcam	Human, Rat ⁶	AB_1267245
Anti- α -SMA	Polyclonal/Rabbit	Ab5694	1:600	Abcam	Human, Mouse ⁷	*
Anti-Sphingosine-1	Polyclonal/Rabbit	Ab71700	1:200	Abcam	Human, Rat, Mouse ⁸	AB_1270891
Anti-TGF- β 1	Polyclonal/Rabbit	E11262	1:200	Spring	Human ⁹	AB_11219319

¹ <https://www.abcam.com/ace2-antibody-ab272690.html>

² <https://www.abcam.com/akt3--akt2--akt1-antibody-y89-ab32505.html>

³ <https://www.biosb.com/biosb-products/caveolin-1-antibody-rmab-ep353/>

⁴ https://issuu.com/leicabiosystems/docs/2013_ihc_and_isb_product_catalog_ro/119

⁵ <https://www.thermofisher.com/antibody/product/IL-4-Antibody-Polyclonal/PA5-25165>

⁶ <https://www.abcam.com/mmp9-antibody-ep1254-ab76003.html>

⁷ <https://www.abcam.com/alpha-smooth-muscle-actin-antibody-ab5694.html>

⁸ <https://www.abcam.com/sphk1-antibody-ab71700.html>

⁹ https://issuu.com/fermelobiotec/docs/catalogo_spring_bioscience

* There is no record.