

## Supplemental Information

### Image Acquisition and Statistical Analysis

After staining placental sections from SARS-CoV-2 negative ( $n = 2$ ) and positive ( $n = 2$ ) mothers, with appropriate primary and secondary antibodies to HIF-1 $\alpha$ , NLRP1, MIP-1 $\beta$ , SDF-1, IL-13, IL-10, and hCG, immunofluorescent images were acquired by a Zeiss LSM510/UV Axiovert 200M confocal microscope with a plain apochromat 40x objective lens, and a 2x zoom, resulting in images 125  $\times$  125  $\mu$ m in area and 1.0  $\mu$ m optical slice thickness (1.0 Airy units for Alexa Fluor 546 or 568 emission channel). In addition, brain sections from the first infant were stained with SARS-CoV-2 spike protein (S1) and nucleocapsid protein. A

random collection of images was systematically captured per slide in a “blinded” manner by moving the microscope stage approximately 10 mm. At least 5 fluorescent images, containing an approximately equal number of cells, were captured per slide. Cells which had clear DAPI staining were traced for total number of pixels (fluorescent intensity of appropriate protein). Eight independent tracings per image, with equal area and DAPI intensity units, were obtained employing Sigma Scan Pro image quantitation software (Sigma, St Louis, MO, USA), allowing fluorescence intensity units from 40 individual tracings to be obtained per slide. Fluorescence intensity units were

normalized to DAPI intensity and were subjected to a 2 tailed t-test, using GraphPad Prism 9 software, San Diego, CA. Intensity units beyond the quantifiable level (ie, saturated) from any cell were specifically omitted from tracings, and slides that were stained only for secondary antibodies were used as additional controls. Values were expressed as fluorescence intensity units per DAPI pixel. A value of  $p < .05$  was considered significant. Finally, SARS-CoV-2 spike glycoprotein 1 (S1) and nucleocapsid protein (image panel C) were qualitatively detected by Stochastic Optical Reconstruction Microscopy (Nikon Instruments, Inc. Melville, New York, USA).