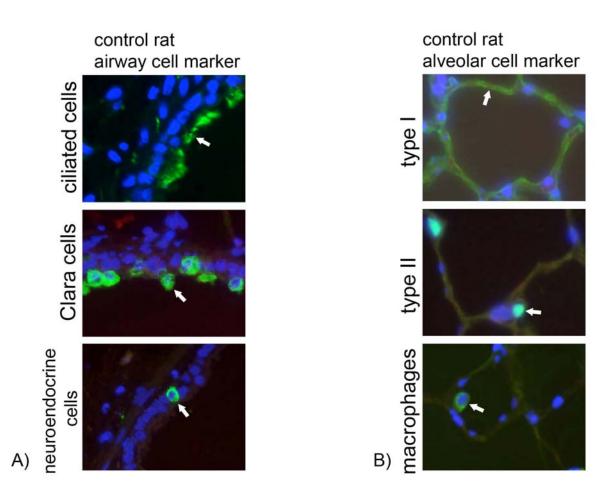
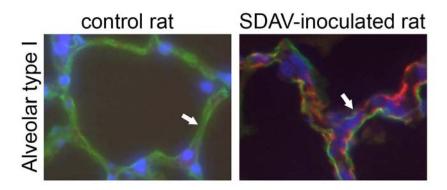


**Supplementary Fig. S1.** Viral titres in homogenized rat lung. Viral titres were measured by plaque assay in L2P-41.a cells.



**Supplementary Fig. S2.** Control rat lung sections. Rat lung paraffin sections were stained for airway (a) and epithelial (b) cell markers (Alexa 488; green secondary antibody), SDAV (Alexa 594; red secondary antibody) and nuclei (DAPI; blue). Control sections were also stained for SDAV. Arrows indicate a cell identified by the marker antibody. In (a), markers for ciliated cells (acetylated–tubulin antibody), Clara cells (CCSP antibody) and neuroendocrine cells (CGRP antibody) were used to identify cell types. In (b), markers for alveolar epithelial type I cells (T1- $\alpha$  antibody), alveolar epithelial type II cells (TTF-1) and macrophages (rat CD68) were used to localize cells. Control sections were also stained for SDAV. Arrows indicate a cell identified by the marker antibody.



**Supplementary Fig. S3.** Change in alveolar wall thickness during SDAV infection. Rat lung paraffin sections were stained for alveolar epithelial type I cells (T1- $\alpha$  antibody, Alexa 488; green secondary antibody), SDAV (Alexa 594; red secondary antibody) and nuclei (DAPI; blue). Arrows point to representative type I cells, indicating the increase in alveolar wall thickness during SDAV infection compared with the control cell.