

Figure S1. Equivalent spherical diameter of crystalline silica used in the experiments. The picture is a screen shot of the product data sheet. Datasheet link: <http://www.ussilica.com/sites/ussilica.com/uploads/files/product-data-sheets/industry/building-products/MINUSIL5-MillCreek.pdf>

HPLC CHROMATOGRAM OF DIOSCIN

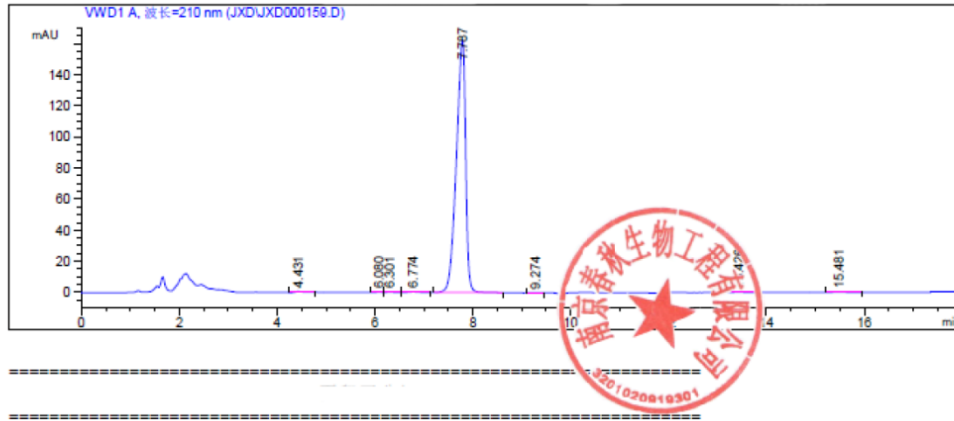


Figure S2. HPLC chromatogram analysis of dioscin. This is provided by Spring & Autumn Biological Engineering Co. Ltd, which demonstrated the purity of dioscin used in the experiment >98%.

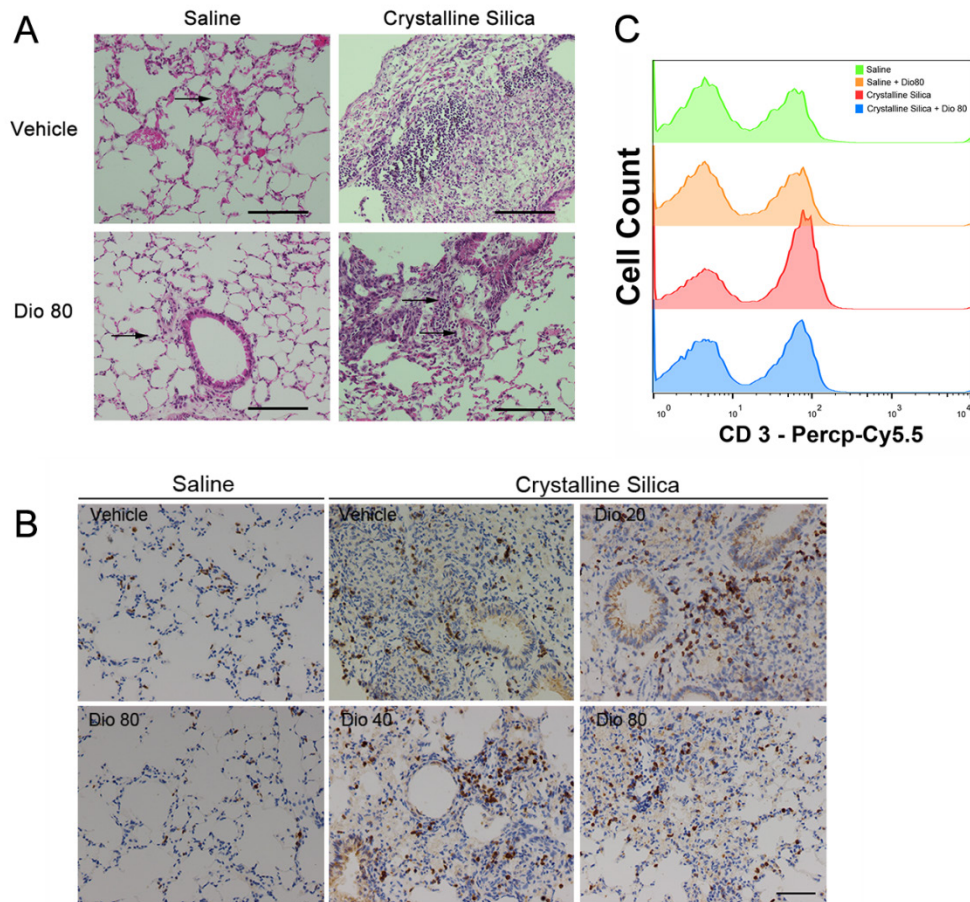


Figure S3. Lymphocytes infiltration in lung tissues were mitigated by dioscin.

(A) H&E staining: Images were taken to present perivascular and peribronchial cell infiltration. (scale bar: 100 μ m) (B) T cell were visualized with anti-CD3 antibody (brown) by immunohistochemistry. Nuclei were stained with hematoxylin (blue). (scale bar 100 μ m) Lung sections of different treated mice for 7 d were used. (C) FACS analysis hilar lymph nodes (HLN) of CD3 positive cells. X axis indicates CD3 positive cells and Y axis indicates cell counts.

Table S1. Primer sequences for qRT-PCR.

| <i>Mus musculus</i> gene name | Forward 5'-3' | Reverse 5'-3' |
|--------------------------------|-------------------------|---------------------------|
| <i>GAPDH</i> | AGGTCGGTGTGAACGGATTTG | TGTAGACCATGTAGTTGAGGTCA |
| <i>Fibronectin</i> | GCAGTGACCACCATTCTG | GGTAGCCAGTGAGCTGAACAC |
| <i>COL1A1</i> | GCTCCTCTTAGGGGCCACT | CCACGTCTCACCATTGGGG |
| <i>Il6</i> | CAACGATGATGCACTTGCAGA | CTCCAGGTAGCTATGGTACTCCAGA |
| <i>Tnf-α</i> | CCCTCACACTCAGATCATCTTCT | GCTACGACGTGGGCTACAG |
| <i>Il-1β</i> | GCAACTGTTCTGAACTCAACT | ATCTTTTGGGGTCCGTCAACT |
| <i>Cd68</i> | TGTCTGATCTTGCTAGGACCG | GAGAGTAACGGCCTTTTTGTGA |
| <i>T-bet</i> | AGCAAGGACGGCGAATGTT | GGGTGGACATATAAGCGGTTCT |
| <i>Ifn-γ</i> | AAGCGTCATTGAATCACACCTG | TGACCTCAAACCTGGCAATACTC |
| <i>GATA3</i> | CTCGGCCATTCGTACATGGAA | GGATACCTCTGCACCGTAGC |
| <i>Il-4</i> | ACGGAGATGGATGTGCCAAAC | AGCACCTTGGAAGCCCTACAGA |
| <i>Ccl12</i> | ATTCACACTTCTATGCCTCCT | ATCCAGTATGGTCTGAAGATCA |
| <i>Ccl19</i> | GGGGTGCTAATGATGCGGAA | CCTTAGTGTGGTGAACACAACA |
| <i>Ccl21</i> | GTGATGGAGGGGGTCAGGA | GGGATGGGACAGCCTAAACT |
| <i>Cxcl12</i> | TGCATCAGTGACGGTAAACCA | TTCTTCAGCCGTGCAACAATC |
| <i>Occludin</i> | TTGAAAGTCCACCTCCTTACAG | CCGGATAAAAAGAGTACGCTGG |
| <i>Cdh1</i> | CAGGTCTCCTCATGGCTTTGC | CTTCCGAAAAGAAGGCTGTCC |
| <i>Sftpc</i> | ATGGACATGAGTAGCAAAGAGG | CACGATGAGAAGGCGTTTGGAG |
| <i>Vimentin</i> | CGTCCACACGCACCTACAG | GGGGGATGAGGAATAGAGGCT |
| <i>Fsp1</i> | TGAGCAACTTGGACAGCAAC | TTCCGGGGTTCCTTATCTGGG |
| <i>Tgf-β</i> | CTCCCGTGGCTTCTAGTGC | GCCTTAGTTTGGACAGGATCTG |
| <i>Foxp3</i> | CCCATCCCCAGGAGTCTTG | ACCATGACTAGGGGCACTGTA |
| <i>Il-10</i> | GGGGCCAGTACAGCCGGG | CTGGCTGAAGGCAGTCCGCA |