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Upregulation of smooth muscle Rho-kinase protein expression in human asthma

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An important phenotypic change is associated with human asthma: the protein expression of both isoforms of Rho-kinase, ROCK1 and ROCK2, is increased in the smooth muscles of intra-parenchymal airways and in the pulmonary blood vessels <http://bit.ly/2pPfyxH>

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To the Editor:

The lack of bronchodilatory response to deep inspiration in asthmatics is thought to be partially due to reduced airway distensibility [1, 2], possibly caused by an increase in airway smooth muscle (ASM) tone and stiffness [3]. Rho-kinase (ROCK) is known to play a role in regulating ASM tone [4] and ASM cytoskeletal stiffness [5].