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Rac1 modulates G-protein-coupled receptor-induced bronchial smooth muscle contraction

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## Abstract

Increasing evidence suggests a functional role of RhoA/Rho-kinase signalling as a mechanism for smooth muscle contraction; however, little is known regarding the roles of Rac1 and other members of the Rho protein family. This study aimed to examine whether Rac1 modulates bronchial smooth muscle contraction. Ring preparations of bronchi isolated from rats were suspended in an organ bath, and isometric contraction of circular smooth muscle was measured. Immunoblotting was used to examine myosin light chain phosphorylation in bronchial smooth muscle. Our results demonstrated that muscle contractions induced by carbachol (CCh) and endothelin-1 (ET-1) were inhibited by

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