

P017 A novel interaction between integrins and a Ras-like GTPase
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Integrins are transmembrane glycoproteins mediating cellular interactions between different cells and with components of the extracellular matrix. Ras superfamily members participate in many cellular processes, primarily as signal transducers and/or regulators of membrane traffic. We have found a Ras superfamily GTPase that interacts with integrin alpha cytoplasmic tails containing the conserved membrane proximal sequence WKLGF~~F~~KR. We show that the small GTPase seems to regulate the actin cytoskeleton and modify cellular adhesion to extracellular matrix. Also, the dynamics of focal adhesion sites seem to be regulated by integrin traffic associated with this GTPase. The interaction is increased when the GTPase is in its GTP-bound form. Prenylation state of the GTPase does not seem to affect the interaction, which is of rather stable nature. The work illustrates a new role for a Ras GTPase in regulation of inside-out signalling of integrins.