

Anti-RhoB Antibody, clone 7F7 clone 7F7, from mouse

Art. ID	SAF-MABS1990
Unit	EA
Deliverydetails	No Dangerous Good

Description

Rho-related GTP-binding protein RhoB (UniProt: P62745, also known as Rho cDNA clone 6, h6) is encoded by the RHOB (also known as ARH6, ARHB) gene (Gene ID: 388) in human. RhoB is a member of the Ras super-family of small GTP-binding proteins, which is involved in hydrolysis of GTP and is active in GTP-bound form. RhoB is a short-lived Rho GTPase whose expression is inducible by a variety of stimuli including growth factors and stress stimuli. Its levels are up-regulated by DNA damaging agents, such as hydrogen peroxide or ionizing radiation. RhoB plays a negative role in tumorigenesis as its deletion is known to cause tumor formation. It is reported to mediate apoptosis in neoplastically transformed cells following DNA damage. It is not considered to be essential for development, but affects cell adhesion and growth factor signaling in transformed cells. RhoB displays 83% homology with RhoA. However, unlike RhoA, which is cytosolic and translocates to plasma membrane upon activation, RhoB localizes to endosomes/multivesicular bodies. RhoB participates in sorting and degradation of growth factors and cytokine receptors. RhoB has three nucleotide-binding regions (aa 12-19, 59-63, and 117-120). RhoB is shown to be critically required for the inflammatory response of endothelial cells to TNF alpha, possibly through MAP kinase activation downstream of the TNFR.