BACKGROUND

GTPase-activating proteins (GAPs) accelerate the intrinsic rate of GTP hydrolysis of Ras-related proteins, resulting in down regulation of their active form. ARHGAP10 (Rho GT-Pase activating protein 10), also known as GRAF2, PSGAP or PS-GAP, is a 786 amino acid cytoplasmic cytoskeletal Rho-GTPase activating protein that is expressed at high levels in heart and skeletal muscle. ARHGAP10 regulates caspase-activated p21 by inhibiting the protein kinase activity and localization of p21 from the nucleus to the perinuclear region. The GAP domain of ARHGAP10 has GAP activity for small GTPases RhoA and Cdc42. ARHGAP10 converts these small GTPases to an inactive GDP-bound state. ARHGAP10 is essential for PTXB2 regulation of cytoskeletal organization via Rho family GTPases.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: ARHGAP10 (human) mapping to 4q31.23; Arhgap10 (mouse) mapping to 8 C1.

SOURCE

ARHGAP10 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ARHGAP10 of human origin.