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Anti-Girdin (C-terminus) Antibody

Catalog # AN1800

Product Information

Application	WB, IHC, ICC, IP
Primary Accession	Q3V6T2
Host	Mouse
Clonality	Mouse Monoclonal
Isotype	IgG1
Clone Names	M012
Calculated MW	216042

Additional Information

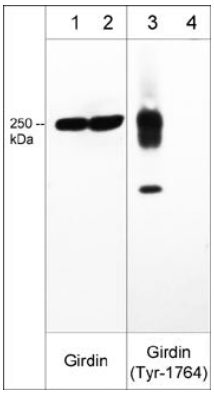
Gene ID	55704
Other Names	APE, Galpha, vesicle, GIV, Girders actin filament, HkRP1, GRDN, CCDC88A
Target/Specificity	Girdin, a member of the CCDC88 (Hook related protein) family, is an actin binding protein involved with cell migration and maintaining cytoskeletal organization. Girdin has conserved domains at the N- and C-terminus that bind microtubules and actin, respectively. It enhances PI3-kinase dependent phosphorylation of proteins, most notably Akt. This same activity can contribute to tumor proliferation, invasion, and metastasis in breast, ovarian, prostate, and pancreatic tissues. Girdin is phosphorylated at three separate locations: Ser-1416, Ser-1674, and Tyr-1764. Ser-1416 is the primary Akt phosphorylation site, while Cyclin-dependent kinases interact with Girdin and phosphorylate Ser-1674. Multiple receptor tyrosine kinases can bind girdin and phosphorylate Tyr-1764.
Dilution	WB~~1:1000 IHC~~1:100~500 ICC~~N/A IP~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-Girdin (C-terminus) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

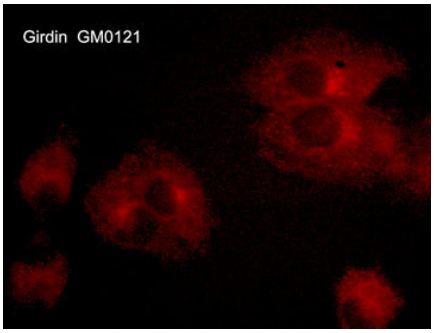
Girdin, a member of the CCDC88 (Hook related protein) family, is an actin binding protein involved with cell migration and maintaining cytoskeletal organization. Girdin has conserved domains at the N- and C-terminus that bind microtubules and actin, respectively. It enhances PI3-kinase dependent phosphorylation of proteins, most notably Akt. This same activity can contribute to tumor proliferation, invasion, and metastasis in breast, ovarian, prostate, and pancreatic tissues. Girdin is phosphorylated at three separate locations: Ser-1416, Ser-1674, and Tyr-1764. Ser-1416 is the primary Akt phosphorylation site,

while Cyclin-dependent kinases interact with Girdin and phosphorylate Ser-1674. Multiple receptor tyrosine kinases can bind girdin and phosphorylate Tyr-1764.

Images



Western blot image of human A431 cell lysates treated with pervanadate (lanes 1-4). The blot was treated with alkaline phosphatase to dephosphorylate Girdin phosphosites (lanes 2 & 4). The blot was probed with mouse monoclonal anti-Girdin (lanes 1 & 2) or rabbit polyclonal anti-Girdin (Tyr-1764), phospho-specific (lanes 3 & 4).



Immunocytochemical labeling of Girdin in aldehyde fixed and NP-40 permeabilized human NCI-H1915 lung carcinoma cells. The cells were labeled with mouse monoclonal anti-Girdin (AN1800). The antibody was detected using goat anti-mouse DyLight® 594.