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Anti-RRAD Antibody

Catalog # AP51493

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P55042
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33245

Additional Information

Gene ID	6236
Other Names	RAD; GTP-binding protein RAD; RAD1; Ras associated with diabetes
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human RRAD. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

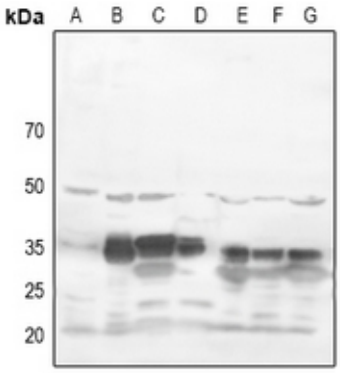
Name	RRAD
Synonyms	RAD
Function	May regulate basal voltage-dependent L-type Ca(2+) currents and be required for beta-adrenergic augmentation of Ca(2+) influx in cardiomyocytes, thereby regulating increases in heart rate and contractile force (By similarity). May play an important role in cardiac antiarrhythmia via the strong suppression of voltage-gated L- type Ca(2+) currents (By similarity). Regulates voltage-dependent L- type calcium channel subunit alpha-1C trafficking to the cell membrane (By similarity). Inhibits cardiac hypertrophy through the calmodulin- dependent kinase II (CaMKII) pathway (PubMed:18056528). Inhibits phosphorylation and activation of CAMK2D (PubMed:18056528).
Cellular Location	Cell membrane.
Tissue Location	Most abundantly expressed in the heart. Also found in the skeletal muscle and lung. Lesser amounts in placenta and kidney Also detected in adipose

tissue. Overexpressed in muscle of type II diabetic humans.

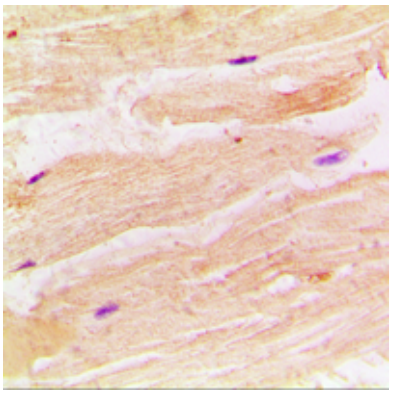
References

Reynet C.,et al.Science 262:1441-1444(1993).
Moyers J.S.,et al.J. Biol. Chem. 272:11832-11839(1997).
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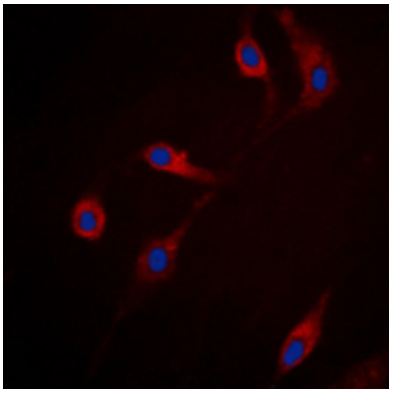
Images



Western blot analysis of RRAD expression in HEK293T (A), Hela (B), mouse lung (C), mouse liver (D), mouse heart (E), rat liver (F), rat heart (G) whole cell lysates. (Predicted band size: 33 kD; Observed band size: 33 kD)



Immunohistochemical analysis of RRAD staining in human muscle formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of RRAD staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.