

# Rad GTPase Polyclonal Antibody

Catalog # AP72139

## Product Information

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<b>Application</b>	WB, IHC-P, IF
<b>Primary Accession</b>	<a href="#">P55042</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	33245

## Additional Information

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<b>Gene ID</b>	6236
<b>Other Names</b>	RRAD; RAD; GTP-binding protein RAD; RAD1; Ras associated with diabetes
<b>Dilution</b>	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200
<b>Format</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
<b>Storage Conditions</b>	-20°C

## Protein Information

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<b>Name</b>	RRAD
<b>Synonyms</b>	RAD
<b>Function</b>	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: <a href="#">18056528</a> ). Inhibits phosphorylation and activation of CAMK2D (PubMed: <a href="#">18056528</a> ).
<b>Cellular Location</b>	Cell membrane.
<b>Tissue Location</b>	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.

## Background

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May play an important role in cardiac antiarrhythmia via the strong suppression of voltage-gated L-type  $\text{Ca}^{2+}$  currents. Regulates voltage-dependent L-type calcium channel subunit  $\alpha_1\text{C}$  trafficking to the cell membrane (By similarity). Inhibits cardiac hypertrophy through the calmodulin-dependent kinase II (CaMKII) pathway. Inhibits phosphorylation and activation of CAMK2D.

## Images

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Western Blot analysis of various cells using Rad GTPase Polyclonal Antibody

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