

# **RRAD** Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51493

# **Product Information**

Application	WB
Primary Accession	<u>P55042</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33245

## **Additional Information**

Gene ID	6236
Other Names	GTP-binding protein RAD, RAD1, Ras associated with diabetes, RRAD, RAD
Target/Specificity	KLH conjugated synthetic peptide derived from human RRAD
Dilution	WB~~ 1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

## **Protein Information**

Name Synonyms	RRAD 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: <u>18056528</u> ). Inhibits phosphorylation and activation of CAMK2D (PubMed: <u>18056528</u> ).
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.

# Background

May play an important role in cardiac antiarrhythmia via the strong suppression of voltage-gated L-type Ca(2+) currents. 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. Inhibits phosphorylation and activation of CAMK2D.

## References

Reynet C.,et al.Science 262:1441-1444(1993). Moyers J.S.,et al.J. Biol. Chem. 272:11832-11839(1997). Chang L.,et al.Circulation 116:2976-2983(2007).

#### Images



Anti-RRAD Antibody at 1:1000 dilution + human heart lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 33 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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