

RRAD (aa36-48) Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3727a

Specification

RRAD (aa36-48) Antibody (internal region) - Product Information

Application WB, E
Primary Accession P55042

Other Accession NP_004156.1, 6236, 56437 (mouse), 83521

<u>(rat)</u>

Reactivity Mouse

Predicted Human, Rat, Pig, Dog

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml
Isotype IgG
Calculated MW 33245

RRAD (aa36-48) Antibody (internal region) - Additional Information

Gene ID 6236

Other Names

GTP-binding protein RAD, RAD1, Ras associated with diabetes, RRAD, RAD

Dilution

WB~~1:1000 E~~N/A

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

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

RRAD (aa36-48) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

RRAD (aa36-48) Antibody (internal region) - 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

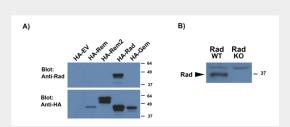
Most abundantly expressed in the heart. Also found in the skeletal muscle and lung. Lesser amounts in placenta and kidney Also detected in adipose tissue. Overexpressed in muscle of type II diabetic humans.

RRAD (aa36-48) Antibody (internal region) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

RRAD (aa36-48) Antibody (internal region) - Images



A): AF3727a (0.5 μ g/ml) staining of HEK293 lysates overexpressing several HA-tagged Mouse GTPases, including Rrad (10 μ g protein in RIPA buffer) and compared with an HA-specific antibody. B): AF3727a (0.5 μ g/ml) staining of WT and KO lysates of Mouse Heart (100 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence. Data provided by Prof. D Andres, University of Kentucky College of Medicine, USA.

RRAD (aa36-48) Antibody (internal region) - Background

Reported variants represent identical protein: NP 004156.1, NP 001122322.1

RRAD (aa36-48) Antibody (internal region) - References

A novel senescence-evasion mechanism involving Grap2 and Cyclin D interacting protein inactivation by Ras associated with diabetes in cancer cells under doxorubicin treatment. Lee I,



Yeom SY, Lee SJ, Kang WK, Park C. Cancer Res. 2010 Jun 1;70(11):4357-65. PMID: 20460530