

**RRAD (aa36-48) Antibody (internal region)**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF3727a****Specification**

---

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

Application	WB
Primary Accession	<a href="#">P55042</a>
Other Accession	<a href="#">NP_004156.1</a> , <a href="#">6236</a> , <a href="#">56437 (mouse)</a> , <a href="#">83521 (rat)</a>
Reactivity	Mouse
Predicted	Human, Rat, Pig, Dog, Cow
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

**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:<a href="http://www.uniprot.org/citations/18056528" target="\_blank">18056528</a>). Inhibits phosphorylation and activation of CAMK2D (PubMed:<a href="http://www.uniprot.org/citations/18056528" target="\_blank">18056528</a>).

### Cellular Location

Cell membrane.

### Tissue Location

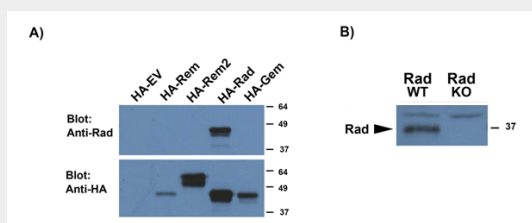
Most abundantly expressed in the heart. Also found in the skeletal muscle and lung. Lesser amounts in placenta and kidney Also detected in adipose tissue. Overexpressed in muscle of type II diabetic humans.

## 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](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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



A): AF3727a (0.5 µg/ml) staining of HEK293 lysates overexpressing several HA-tagged Mouse GTPases, including Rad (10 µg protein in RIPA buffer) and compared with an HA-specific antibody. B): AF3727a (0.5 µg/ml) staining of WT and KO lysates of Mouse Heart (100 µg 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