

## Rabbit Anti-RRAD antibody

SL0278R

<b>Product Name</b>	RRAD
<b>Chinese Name</b>	RRAD 抗体
<b>Alias</b>	RAD; Ras-related associated with diabetes; RAD1; REM3; Cell cycle checkpoint protein Hrad1; Cell cycle checkpoint protein Rad 1 A / B; Cell cycle checkpoint protein RAD1; Checkpoint control protein HRAD1; Checkpoint control protein RAD1; DNA repair exonuclease; DNA repair exonuclease rad1; DNA repair exonuclease rad1 homolog; DNA repair exonuclease REC1; DNA repair protein RAD1; EC 3.1.11.2; Exonuclease homolog RAD1; GTP-binding protein RAD; hRAD 1; hRAD1; MGC77779; RAD 1; RAD; RAD1 homolog (S. pombe); RAD1 homolog; Rad1 like DNA damage checkpoint; Rad1 like DNA damage checkpoint protein; RAD1, S. pombe, homolog of; Ras associated with diabetes; REC 1; REC1; RRAD; RAD_HUMAN.
<b>Research Area</b>	Cell biology immunology Diabetes Endocrinopathy
<b>Immunogen Species</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>React Species</b>	(predicted: Human, Mouse, Rat, Dog, Cow, Horse, Rabbit, ) IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000 (Paraffin sections need antigen repair)
<b>Applications</b>	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Theoretical molecular weight</b>	33kDa
<b>Cellular localization</b>	The cell membrane
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>immunogen</b>	KLH conjugated synthetic peptide derived from human RRAD: 211-308/308
<b>Lsotype</b>	IgG
<b>Purification</b>	affinity purified by Protein A
<b>Buffer Solution</b>	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

**Storage**

Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

**Attention**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**PubMed**

[PubMed](#)

Human Rad1 is a component of a heterotrimeric PCNA like complex that also contains the Rad9 and Hus1 proteins. This complex is believed to be involved in cellular responses to DNA damage, possibly by associating with Rad17 and several components of the PCNA-loading heteropentamer, replication factor C. Human Rad1 exhibits significant homology to Rad1 from *S. pombe*, and its expression in yeast rad1 mutants has been shown to partially restore radiation resistance and G2 checkpoint activity. It has also been shown to possess exonuclease activity.

**Function:**

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.

**Product Detail**

**Subunit:**

Interacts with calmodulin preferentially in the inactive, GDP-bound form. Binds CAMKII which is capable of phosphorylating RAD in vitro. Interacts with CAMK2D and CACNB2. Interaction with CACNB2 regulates the trafficking of CACNA1C to the cell membrane (By similarity).

**Subcellular Location:**

Cell membrane.

**Tissue Specificity:**

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.

**Similarity:**

Belongs to the small GTPase superfamily. RGK family.

**SWISS:**

P55042

**Gene ID:**

6236

**Database links:**

[Entrez Gene: 6236](#) Human

[Entrez Gene: 56437](#) Mouse

[Entrez Gene: 83521](#) Rat

[Omim: 179503](#) Human

[SwissProt: P55042](#) Human

[SwissProt: O88667](#) Mouse

[SwissProt: P55043](#) Rat

[Unigene: 1027](#) Human

[Unigene: 29467](#) Mouse

[Unigene: 11189](#) Rat

该抗体是与 Diabetes 的胰岛素抵抗研究有关的蛋白。