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RAD Recombinant Rabbit mAb

Catalog # AP100300

Product Information

Application	WB, IHC-P, IHC-F, IF, IP, E
Primary Accession	P55042
Other Accession	P55042
Reactivity	Human
Host	Rabbit
Clonality	Recombinant
Calculated MW	33245
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the small GTPase superfamily. RGK family.
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).
Background Descriptions	similarity:Belongs to the small GTPase superfamily. RGK family.,subunit:Interacts with calmodulin preferentially to the inactive, GDP-form. Binds CAMKII which is capable of phosphorylating RAD in vitro.,tissue specificity:Skeletal and cardiac muscle, and lung. Lesser amounts in placenta and kidney. Also detected in adipose tissue. Overexpressed in muscle of type II diabetic humans.,

Additional Information

Gene ID	6236
Other Names	RAD; RAD1; REM3; RAD_HUMAN; RRAD; Ras associated with diabetes; RAD_MOUSE; RAD_RAT; RRAD, Ras related glycolysis inhibitor and calcium channel regulator; Ras-related associated with diabetes; RRAD, Ras related glycolysis inihibitor and calcium channel regulator; GTP-binding protein RAD
Dilution	IHC-P=1:50-200,IHC-F=1:50-200,WB=1:500-2000,IF=1:50-200,ELISA=1:5000-10000,IP=1:50-200
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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