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Mouse Adrbk1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13797b

Product Information

Application	WB, E
Primary Accession	Q99MK8
Other Accession	P26817, P25098, P21146
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Rat, Canine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34168
Calculated MW	79639
Antigen Region	645-674

Additional Information

Gene ID	110355
Other Names	Beta-adrenergic receptor kinase 1, Beta-ARK-1, G-protein-coupled receptor kinase 2, Adrbk1, Grk2
Target/Specificity	This Mouse Adrbk1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 645-674 amino acids from the C-terminal region of mouse Adrbk1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Adrbk1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

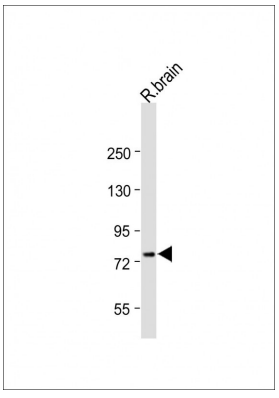
Name	Grk2 {ECO:0000312|MGI:MGI:87940}
Synonyms	Adrbk1

Function	Specifically phosphorylates the activated forms of G protein- coupled receptors (PubMed:18056263, PubMed:30284927, PubMed:38883814, PubMed:33886552). Such receptor phosphorylation initiates beta-arrestin-mediated receptor internalization, and signaling events leading to their desensitization (PubMed:18056263, PubMed:30284927, PubMed:38883814, PubMed:33886552). Phosphorylates the agonist-occupied form of the beta-adrenergic and closely related receptors, probably inducing a desensitization of them (By similarity). Phosphorylates catecholamine-activated ADRB2 to regulate physiological cardiomyocyte contraction rate responses (PubMed:18056263). Also phosphorylates ligand-bound C3a and C5a anaphylatoxin receptors (C3AR1 and C5AR1, respectively), leading to receptor desensitization (By similarity). Key regulator of LPAR1 signaling (By similarity). Competes with RALA for binding to LPAR1 thus affecting the signaling properties of the receptor (By similarity). Desensitizes LPAR1 and LPAR2 in a phosphorylation-independent manner (By similarity). Positively regulates ciliary smoothened (SMO) signaling pathway by mediating phosphorylation of SMO, facilitating SMO trafficking into the cilium and the stimulation of SMO activity (PubMed:33886552, PubMed:39138140). Also positively regulates SMO signaling by mediating phosphorylation of GPR161, a key inhibitor SMO signaling, promoting ciliary export of GPR161 (By similarity). Inhibits relaxation of airway smooth muscle in response to blue light (PubMed:30284927). Also able to mediate phosphorylation-independent desensitization of dopamine receptor DRD2 (By similarity).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:P26817}. Cell membrane {ECO:0000250|UniProtKB:P21146}. Cell projection, cilium membrane. Postsynapse {ECO:0000250|UniProtKB:P26817}. Presynapse {ECO:0000250|UniProtKB:P26817}

Background

Specifically phosphorylates the agonist-occupied form of the beta-adrenergic and closely related receptors, probably inducing a desensitization of them.

Images



All lanes : Anti-Mouse Adrbk1 Antibody (C-term) at 1:1000 dilution Lane 1: rat brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 76kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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