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Anti-GRK3 Picoband Antibody

Catalog # ABO12368

Product Information

Application	WB
Primary Accession	P35626
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Beta-adrenergic receptor kinase 2(ADRBK2) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	157
Other Names	Beta-adrenergic receptor kinase 2, Beta-ARK-2, 2.7.11.15, G-protein-coupled receptor kinase 3 {ECO:0000312|MIM:109636}, GRK3 {ECO:0000312|MIM:109636}, ADRBK2, BARK2
Calculated MW	79710
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Source	Eukaryota
Protein Name	Beta-adrenergic receptor kinase 2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human GRK3 (635-669aa ESDPEFVQWKKELNETFKEAQRLLRRAPKFLNKPR), different from the related mouse and rat sequences by five amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Protein Information

Name	GRK3 (HGNC:290)
Function	Specifically phosphorylates the activated forms of G protein- coupled receptors (PubMed:21799898, PubMed:33859231). Such receptor phosphorylation initiates beta-arrestin-mediated receptor internalization, and signaling events leading to their desensitization (PubMed:21799898, PubMed:33859231). Phosphorylates the agonist-occupied form of the beta-adrenergic and closely related receptors (By similarity). Also phosphorylates ligand-bound C3a and C5a anaphylatoxin receptors (C3AR1 and C5AR1, respectively), leading to receptor desensitization (PubMed:21799898). Positively regulates ciliary smoothened (SMO) signaling pathway by mediating phosphorylation of SMO, facilitating SMO trafficking into the cilium and the stimulation of SMO activity (By similarity).
Cellular Location	Postsynapse {ECO:0000250|UniProtKB:P26819}. Presynapse {ECO:0000250|UniProtKB:P26819}

Background

Beta-adrenergic receptor kinase 2 (beta-ARK-2), also known as G-protein-coupled receptor kinase 3 (GRK3), is an enzyme that in humans is encoded by the ADRBK2 gene. The human ADRBK2 gene is located on 22q11. The beta-adrenergic receptor kinase specifically phosphorylates the agonist-occupied form of the beta-adrenergic and related G protein-coupled receptors. Overall, the beta adrenergic receptor kinase 2 has 85% amino acid similarity with beta adrenergic receptor kinase 1, with the protein kinase catalytic domain having 95% similarity. These data suggest the existence of a family of receptor kinases which may serve broadly to regulate receptor function.

Images



Anti- GRK Picoband antibody, ABO12368, Western blottingAll lanes: Anti GRK3(ABO12368) at 0.5ug/mlWB: JURKAT Whole Cell Lysate at 40ugPredicted bind size: 80KDObserved bind size: 80KD

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