Datasheet for ABIN1882061

anti-GRK2 antibody (C-Term)

3 Images | 6 Publications

Go to Product page

Overview

Quantity:	400 µL
Target:	GRK2 (ADRBK1)
Binding Specificity:	AA 633-660, C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GRK2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	This ADRBK1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 633-660 amino acids from the C-terminal region of human ADRBK1.
Clone:	RB0982
Isotype:	Ig Fraction
Predicted Reactivity:	B, M, Rat
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Target Details

Target:	GRK2 (ADRBK1)

Target Details

Alternative Name:	ADRBK1 (ADRBK1 Products)
Background:	Beta-adrenergic receptor kinase (ADRBK1), also known as GRK2, phosphorylates the beta-2-adrenergic receptor and appears to mediate agonist-specific desensitization observed at high agonist concentrations. ADRBK1 is an ubiquitous cytosolic enzyme that specifically phosphorylates the activated form of the beta-adrenergic and related G-protein-coupled receptors. Heart failure is accompanied by severely impaired beta-adrenergic receptor (beta-AR) function. An important mechanism for the rapid desensitization of beta-AR function is agonist-stimulated receptor phosphorylation by the beta-AR kinase (beta-ARK1), an enzyme known to be elevated in failing human heart tissue. Abnormal coupling of beta-adrenergic receptor to G protein is involved in the pathogenesis of the failing heart.
Molecular Weight:	79574
NCBI Accession:	NP_001610
UniProt:	P25098
Pathways:	EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Regulation of G-Protein Coupled Receptor Protein Signaling, CXCR4-mediated Signaling Events, G-protein mediated Events, Interaction of EGFR with phospholipase C-gamma, Thromboxane A2 Receptor Signaling

Application Details

Application Notes:	WB: 1:1000. IHC-P: 1:50~100. IHC-P: 1:50~100
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Expiry Date:	6 months

Product cited in:

Rao, Rapoport, Kim: "Decreased GRK3 but not GRK2 expression in frontal cortex from bipolar disorder patients." in: **The international journal of neuropsychopharmacology / official scientific journal of the Collegium Internationale Neuropsychopharmacologicum (CINP)**, Vol. 12, Issue 6, pp. 851-60, (2009) (PubMed).

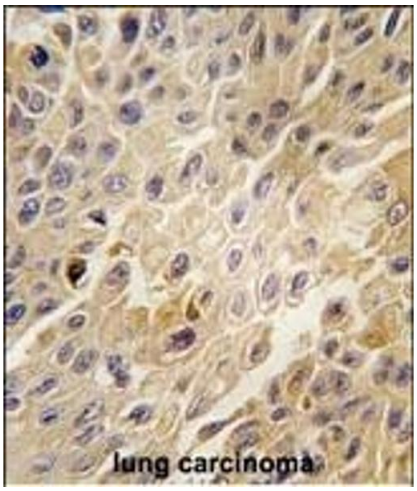
Eichmann, Lorenz, Hoffmann, Brockmann, Krasel, Lohse, Quitterer: "The amino-terminal domain of G-protein-coupled receptor kinase 2 is a regulatory Gbeta gamma binding site." in: **The Journal of biological chemistry**, Vol. 278, Issue 10, pp. 8052-7, (2003) (PubMed).

Li, Xiang, Su, Zhang, Huang, Ma: "Agonist-induced formation of opioid receptor-G protein-coupled receptor kinase (GRK)-G beta gamma complex on membrane is required for GRK2 function in vivo." in: **The Journal of biological chemistry**, Vol. 278, Issue 32, pp. 30219-26, (2003) (PubMed).

Wan, Sambi, Tate, Waters, Pyne et al.: "The inhibitory gamma subunit of the type 6 retinal cGMP phosphodiesterase functions to link c-Src and G-protein-coupled receptor kinase 2 in a signaling unit that regulates p42/p44 mitogen-activated ..." in: **The Journal of biological chemistry**, Vol. 278, Issue 20, pp. 18658-63, (2003) (PubMed).

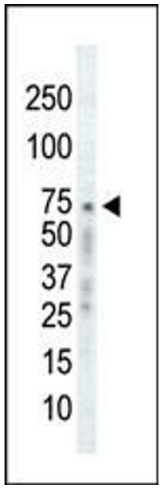
Yang, Zhang, Lai, Xing, Liu: "Pleckstrin homology domain of G protein-coupled receptor kinase-2 binds to PKC and affects the activity of PKC kinase." in: **World journal of gastroenterology : WJG**, Vol. 9, Issue 4, pp. 800-3, (2003) (PubMed).

There are more publications referencing this product on: Product page



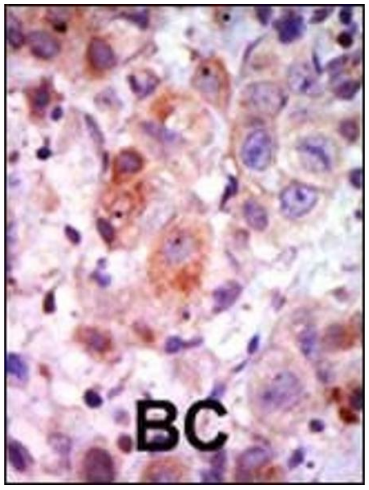
Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with GRK2 Antibody (C-term) (ABIN1882061 and ABIN2841168) , which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry, clinical relevance has not been evaluated.



Western Blotting

Image 2. Western blot analysis of anti-GRK2 C-term Pab (ABIN1882061 and ABIN2841168) in Ramos cell lysate. GRK2 (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



Immunohistochemistry (Paraffin-embedded Sections)

Image 3. Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry, clinical relevance has not been evaluated. BC = breast carcinoma, HC = hepatocarcinoma.