



GRK 1 (phospho Ser21) Polyclonal Antibody

Catalog No	YP-Ab-14480
Isotype	IgG
Reactivity	Human;Mouse;Rat;Monkey
Applications	WB;IHC;IF;ELISA
Gene Name	GRK1
Protein Name	Rhodopsin kinase
Immunogen	The antiserum was produced against synthesized peptide derived from human GRK1 around the phosphorylation site of Ser21. AA range:6-55
Specificity	Phospho-GRK 1 (S21) Polyclonal Antibody detects endogenous levels of GRK 1 protein only when phosphorylated at S21.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	GRK1; RHOK; Rhodopsin kinase; RK; G protein-coupled receptor kinase 1
Observed Band	63kD
Cell Pathway	Membrane ; Lipid-anchor . Cell projection, cilium, photoreceptor outer segment . Subcellular location is not affected by light or dark conditions. .
Tissue Specificity	Retinal-specific. Expressed in rods and cones cells.
Function	catalytic activity:ATP + [rhodopsin] = ADP + [rhodopsin] phosphate.,disease:Defects in GRK1 are a cause of congenital stationary night blindness Oguchi type (CSNBO) [MIM:258100]; also known as Oguchi disease. Congenital stationary night blindness is a non-progressive retinal disorder characterized by impaired night vision. CSNBO is an autosomal recessive form associated with fundus discoloration and abnormally slow dark adaptation.,function:Phosphorylates rhodopsin thereby initiating its deactivation.,online information:Retina International's Scientific Newsletter,PTM:Autophosphorylated.,PTM:Farnesylation is required for full activity.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. GPRK subfamily.,similarity:Contains 1 AGC-kinase C-terminal domain.,similarity:Contains 1 protein kinase domain.,similarity:Contains 1 RGS domain.,tissue specificity:R



Background

This gene encodes a member of the guanine nucleotide-binding protein (G protein)-coupled receptor kinase subfamily of the Ser/Thr protein kinase family. The protein phosphorylates rhodopsin and initiates its deactivation. Defects in GRK1 are known to cause Oguchi disease 2 (also known as stationary night blindness Oguchi type-2). [provided by RefSeq, Jul 2008],

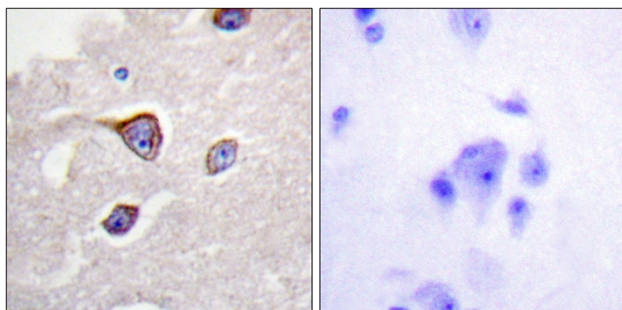
matters needing attention

Avoid repeated freezing and thawing!

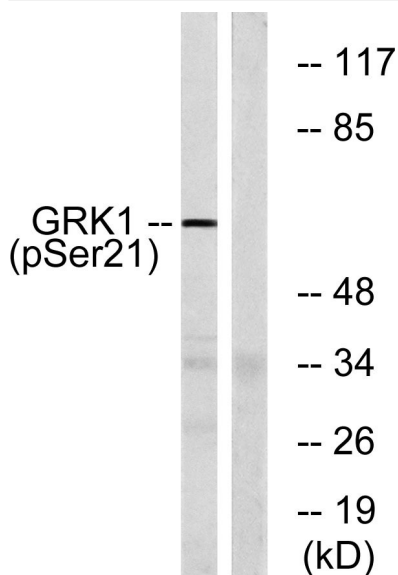
Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Immunohistochemistry analysis of paraffin-embedded human brain, using GRK1 (Phospho-Ser21) Antibody. The picture on the right is blocked with the phosphopeptide.



Western blot analysis of lysates from COS7 cells treated with TNF 20ng/ml 5', using GRK1 (Phospho-Ser21) Antibody. The lane on the right is blocked with the phosphopeptide.