



# GRK 1 (phospho Ser21) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-14480
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat;Monkey
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	GRK1
<b>Protein Name</b>	Rhodopsin kinase
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human GRK1 around the phosphorylation site of Ser21. AA range:6-55
<b>Specificity</b>	Phospho-GRK 1 (S21) Polyclonal Antibody detects endogenous levels of GRK 1 protein only when phosphorylated at S21.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	GRK1; RHOK; Rhodopsin kinase; RK; G protein-coupled receptor kinase 1
<b>Observed Band</b>	63kD
<b>Cell Pathway</b>	Membrane ; Lipid-anchor . Cell projection, cilium, photoreceptor outer segment . Subcellular location is not affected by light or dark conditions. .
<b>Tissue Specificity</b>	Retinal-specific. Expressed in rods and cones cells.
<b>Function</b>	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],

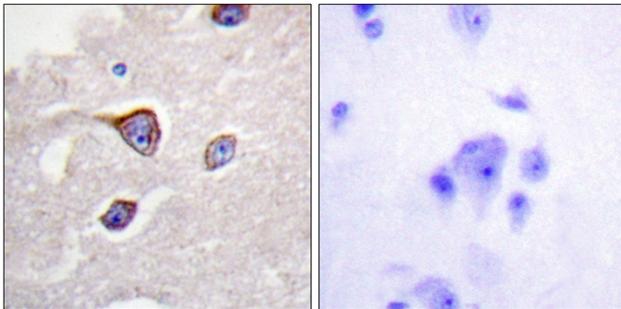
**matters needing attention**

Avoid repeated freezing and thawing!

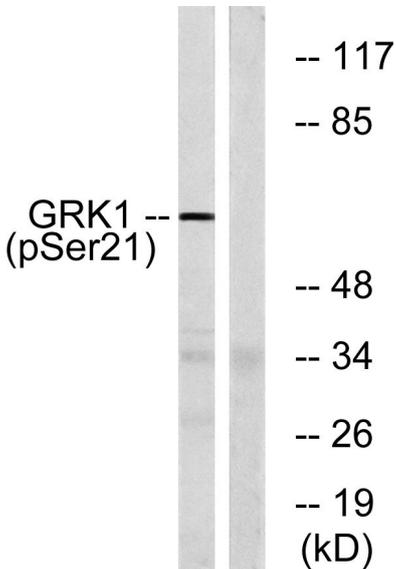
**Usage suggestions**

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 phospho peptide.



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 phospho peptide.