



# GRK 1 (phospho Ser21) Polyclonal Antibody

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| <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>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>                    | EC:2.7.11.14;G protein-coupled receptor kinase 1;GPRK1;Rhodopsin kinase; Rhodopsin;GRK1;RHOK;RK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Observed Band</b>               | 63kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Calculated Molecular Weight</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.,<br>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.,<br>function:Phosphorylates rhodopsin thereby initiating its deactivation.,online information:Retina International's Scientific Newsletter,<br>PTM:Autophosphorylated.,PTM:Farnesylation is required for full activity.,<br>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],

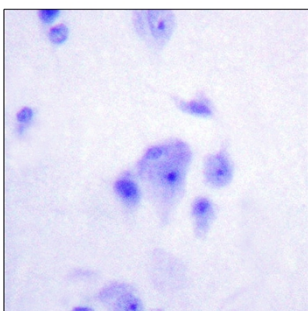
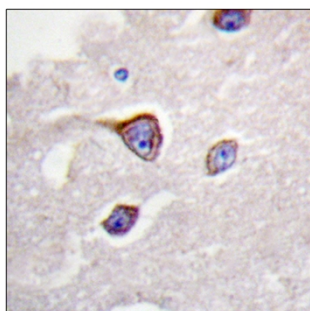
#### matters needing attention

Avoid repeated freezing and thawing!

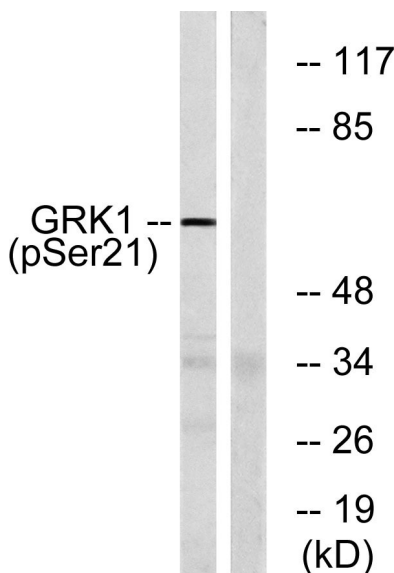
#### Usage suggestions

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.