


Product datasheet

Anti-GRK1 (phospho S21) antibody ab74033

2 Images

Overview

| | |
|----------------------------|--|
| Product name | Anti-GRK1 (phospho S21) antibody |
| Description | Rabbit polyclonal to GRK1 (phospho S21) |
| Host species | Rabbit |
| Specificity | ab74033 detects endogenous levels of GRK1 only when phosphorylated at serine 21. |
| Tested applications | Suitable for: WB, ELISA, IHC-P |
| Species reactivity | Reacts with: Human Predicted to work with: Mouse, Rat  |
| Immunogen | Synthetic phosphopeptide derived from human GRK1 around the phosphorylation site of serine 21 (R-G-S ^P -F-D). |
| Positive control | COS7 cell extracts treated with TNF (20ng/ml, 5mins) and human brain tissue. |

Properties

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|-----------------------------|---|
| Form | Liquid |
| Storage instructions | Frozen Stock (-20C). Shelf life 12 months. |
| Storage buffer | Preservative: 0.02% Sodium Azide Constituents: 50% Glycerol, PBS (without Mg ²⁺ and Ca ²⁺), 150mM Sodium chloride, pH 7.4 |
| Purity | Immunogen affinity purified |
| Purification notes | ab74033 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site. |
| Clonality | Polyclonal |
| Isotype | IgG |

Applications

Our [Abpromise guarantee](#) covers the use of **ab74033** in the following tested applications.

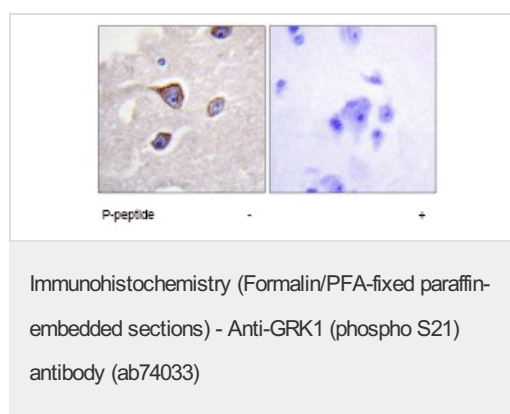
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|-------------|-----------|--|
| WB | | 1/500 - 1/1000. Detects a band of approximately 63 kDa (predicted molecular weight: 63 kDa). |
| ELISA | | 1/10000. |
| IHC-P | | 1/50 - 1/100. |

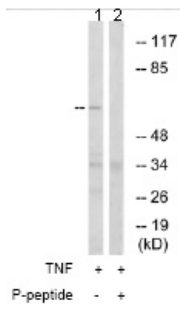
Target

| | |
|---|--|
| Function | Retina-specific kinase involved in the signal turnoff via phosphorylation of rhodopsin (RHO), the G protein- coupled receptor that initiates the phototransduction cascade. This rapid desensitization is essential for scotopic vision and permits rapid adaptation to changes in illumination. |
| Tissue specificity | Retinal-specific. Expressed in rods and cones cells. |
| Involvement in disease | Night blindness, congenital stationary, Oguchi type 2 |
| Sequence similarities | Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. GPRK subfamily. Contains 1 AGC-kinase C-terminal domain. Contains 1 protein kinase domain. Contains 1 RGS domain. |
| Post-translational modifications | Autophosphorylated, Ser-21 is a minor site of autophosphorylation compared to Ser-491 and Thr-492 (By similarity). Phosphorylation at Ser-21 is regulated by light and activated by cAMP. Farnesylation is required for full activity. |
| Cellular localization | Membrane. |

Images



ab74033 at 1/50 dilution staining GRK1 in human brain by Immunohistochemistry, Paraffin-embedded tissue, in the absence or presence of the immunising peptide.



Western blot - Anti-GRK1 (phospho S21) antibody (ab74033)

All lanes : Anti-GRK1 (phospho S21) antibody (ab74033) at 1/500 dilution

Lane 1 : COS7 cell extracts, treated with TNF (20ng/ml, 5mins)

Lane 2 : COS7 cell extracts, treated with TNF (20ng/ml, 5mins) with immunising peptide

at 10 µg

Lysates/proteins at 30 µg per lane.

Predicted band size: 63 kDa

Observed band size: 63 kDa

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