

#5878 Store at -20C

GRK6 (D1A4) Rabbit mAb


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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB	H M R	Endogenous	70	Rabbit IgG	#P43250	2870

Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity / Sensitivity

GRK6 (D1A4) Rabbit mAb recognizes endogenous levels of total GRK6 protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu89 of human GRK6 protein.

Background

G protein-coupled **R**eceptor **K**inase **6** (GRK6) is one of 7 members of the GRK serine/threonine kinase subfamily, which are known primarily for their role in desensitizing activated G protein-coupled receptors (GPCRs) (1,2). GRKs function by phosphorylating serine/threonine residues in activated GPCRs. Upon phosphorylation these residues serve as binding sites for β -arrestin proteins, inhibiting re-activation of GPCRs by blocking their re-association with G proteins (3). There is evidence that GRKs can also modulate selected non-GPCR signaling pathways (2). For example, GRK6 has been shown to modulate the Wnt signaling pathway via phosphorylation of LRP6 (4), and the insulin-like growth factor signaling pathway (5). GRK6 may also play a role in immune system function. Investigators have found GRK6 expression is typically abundant in hematopoietic tumor cell lines, and a recent research study demonstrated that GRK6 suppression was selectively lethal for a number of myeloma tumor cell lines (6).

Background References

- Mushegian, A. et al. (2012) *PLoS One* 7, e33806.
- Gurevich, E.V. et al. (2012) *Pharmacol Ther* 133, 40-69.
- Ribas, C. et al. (2007) *Biochim Biophys Acta* 1768, 913-22.
- Chen, M. et al. (2009) *J Biol Chem* 284, 35040-8.
- Zheng, H. et al. (2012) *Proc Natl Acad Sci U S A* 109, 7055-60.
- Tiedemann, R.E. et al. (2010) *Blood* 115, 1594-604.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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