

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human GRK2 in direct ELISAs and Western blots.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2089B
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human GRK2 Pro468-Leu689 Accession # P25098
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	See Below
Simple Western	1 µg/mL	See Below

DATA

Western Blot

Detection of Human, Mouse, and Rat GRK2 by Western Blot. Western blot shows lysates of THP-1 human acute monocytic leukemia cell line, Ramos human Burkitt's lymphoma cell line, LL/2 mouse Lewis lung carcinoma cell line, H4-II-E-C3 rat hepatoma cell line, and C6 rat glioma cell line. PVDF membrane was probed with 0.1 µg/mL of Rabbit Anti-Human/Mouse/Rat GRK2 Monoclonal Antibody (Catalog # MAB43391) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for GRK2 at approximately 76 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Simple Western

Detection of Human GRK2 by Simple Western™. Simple Western lane view shows lysates of Ramos human Burkitt's lymphoma cell line and THP-1 human acute monocytic leukemia cell line, loaded at 0.2 mg/mL. A specific band was detected for GRK2 at approximately 80 kDa (as indicated) using 1 µg/mL of Rabbit Anti-Human/Mouse/Rat GRK2 Monoclonal Antibody (Catalog # MAB43391). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

G protein-coupled receptor kinases (GRKs) are important modulators of G protein-coupled receptor (GPCR) signaling. Receptor phosphorylation by specific GRKs plays a key role in triggering rapid desensitization. The GRK family consists of 7 isoforms that share a central catalytic domain with homology to other serine/threonine kinases. The catalytic domain is flanked by an amino-terminal RGS domain of 183-188 amino acids and a carboxyl-terminus of variable length. GRK2 is a member of the βARK subfamily, and was originally termed β-adrenergic receptor kinase 1 (βARK1).