BACKGROUND
Heterotrimeric G protein-mediated signal transduction is a dynamically regulated process with the intensity of signal decreasing over time despite the continued presence of the agonist. This phenomenon, referred to as agonist-mediated desensitization, involves phosphorylation of the receptor by two classes of enzymes. The first class is comprised of the second messenger-regulated kinases, such as c-AMP dependent protein kinase A and protein kinase C. The second class includes the G protein-coupled receptor kinases (GRKs). At least seven members of the GRK family have been identified. These include rhodopsin kinase (GRK 1), two forms of β-adrenergic receptor kinase: GRK 2 (βARK, βARK1) and GRK 3 (βARK2), IT-11 (GRK 4), GRK 5, GRK 6 and GRK 7. Phosphorylation of receptors by GRKs appears to be strictly dependent on the receptor being in its agonist-activated state.

CHROMOSOMAL LOCATION
Genetic locus: ADRBK1 (human) mapping to 11q13.2, ADRBK2 (human) mapping to 22q12.1; Adrbk1 (mouse) mapping to 19 A, Adrbk2 (mouse) mapping to 5 F.

SOURCE
GRK 2/3 (H-222) is a rabbit polyclonal antibody raised against amino acids 468-689 mapping at the C-terminus of GRK 2 of human origin.

PRODUCT
Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS
GRK 2/3 (H-222) is recommended for detection of GRK 2 and GRK 3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GRK 2/3 (H-222) is also recommended for detection of GRK 2 and GRK 3 in additional species, including equine, canine, bovine, porcine and avian.

Molecular Weight of GRK 2: 80 kDa.
Molecular Weight of GRK 3: 83 kDa.


STORAGE
Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS
See our web site at www.scbt.com or our catalog for detailed protocols and support products.

RESEARCH USE
For research use only, not for use in diagnostic procedures.

DATA

SELECT PRODUCT CITATIONS

Try GRK 2 (C-9): sc-13143 or GRK 3 (C-11): sc-365197, our highly recommended monoclonal alternatives to GRK 2/3 (H-222). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see GRK 2 (C-9): sc-13143.