SANTA CRUZ BIOTECHNOLOGY, INC.

GRK 7 (h): 293T Lysate: sc-128738

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.

REFERENCES

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5. Dzimiri, N., Muiya, P., Andres, E. and Al-Halees, Z. 2004. Differential functional expression of human myocardial G protein receptor kinases in left ventricular cardiac diseases. Eur. J. Pharmacol. 489: 167-177.
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CHROMOSOMAL LOCATION

Genetic locus: GRK7 (human) mapping to 3q23.

PRODUCT

GRK 7 (h): 293T Lysate represents a lysate of human GRK 7 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

GRK 7 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive GRK 7 antibodies. Recommended use: 10-20 µl per lane.

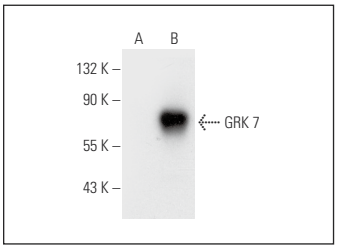
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

GRK 7 (C-2): sc-398371 is recommended as a positive control antibody for Western Blot analysis of enhanced human GRK 7 expression in GRK 7 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

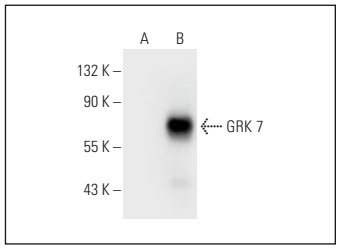
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



GRK 7 (C-2): sc-398371. Western blot analysis of GRK 7 expression in non-transfected: sc-117752 (**A**) and human GRK 7 transfected: sc-128738 (**B**) 293T whole cell lysates.



GRK 7 (F-4): sc-398660. Western blot analysis of GRK 7 expression in non-transfected: sc-117752 (**A**) and human GRK 7 transfected: sc-128738 (**B**) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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