

# Produktinformation



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Diagnostik & molekulare Diagnostik



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# Lieferung & Zahlungsart

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# GRK 2 (m): 293T Lysate: sc-120637



The Power to Question

#### **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  $\beta$ -adrenergic receptor kinase: GRK 2 ( $\beta$ ARK,  $\beta$ ARK1) and GRK 3 ( $\beta$ ARK2), 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**

- Hausdorff, W.P., et al. 1990. Turning off the signal: desensitization of β-adrenergic receptor function. FASEB J. 4: 2881-2889.
- Lorenz, W., et al. 1991. The receptor kinase family: primary structure of rhodopsin kinase reveals similarities to the β-adrenergic receptor kinase. Proc. Natl. Acad. Sci. USA 88: 8715-8719.
- 3. Benovic, J.L., et al. 1991. Cloning, expression, and chromosomal localization of β-adrenergic receptor kinase 2. J. Biol. Chem. 266: 14939-14946.
- 4. Inglese, J., et al. 1993. Structure and mechanism of the G protein-coupled receptor kinases. J. Biol. Chem. 268: 23735-23738.
- 5. Liggett, S.B., et al. 1993. Structural basis for receptor subtype-specific regulation revealed by a chimeric  $\beta$  3/ $\beta$  2-adrenergic receptor. Proc. Natl. Acad. Sci. USA 90: 3665-3669.
- 6. Premont, R.T., et al. 1994. Identification, purification, and characterization of GRK5, a member of the family of G protein-coupled receptor kinases. J. Biol. Chem. 269: 6832-6841.
- 7. Pei, G., et al. 1994. An approach to the study of G-protein-coupled receptor kinases: an *in vitro*-purified membrane assay reveals differential receptor specificity and regulation by  $G\beta\gamma$  subunits. Proc. Natl. Acad. Sci. USA 91: 3633-3636.
- 8. Inglese, J., et al. 1994. Functionally active targeting domain of the  $\beta$ -adrenergic receptor kinase: an inhibitor of  $G_{\beta\gamma}$ -mediated stimulation of type II adenylyl cyclase. Proc. Natl. Acad. Sci. USA 91: 3637-3641.

# **CHROMOSOMAL LOCATION**

Genetic locus: Adrbk1 (mouse) mapping to 19 A.

#### **PRODUCT**

GRK 2 (m): 293T Lysate represents a lysate of mouse GRK 2 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l 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 2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive GRK 2 antibodies. Recommended use: 10-20 µl per lane.

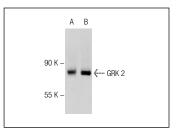
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

GRK 2 (C-9): sc-13143 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse GRK 2 expression in GRK 2 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-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## **DATA**



GRK 2 (C-9): sc-13143. Western blot analysis of GRK 2 expression in non-transfected: sc-117752 (**A**) and mouse GRK 2 transfected: sc-120637 (**B**) 293T whole

#### **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.

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