RACK7 (K-18): sc-85862



The Power to Question

BACKGROUND

Members of the protein kinase C (PKC) family play a key regulatory role in a variety of cellular functions including cell growth and differentiation, gene expression, hormone secretion and membrane function. Receptor for activated C kinases, termed RACKs, are intracellular receptors for activated PKC that serve as anchors and may be involved in the activation-induced translocation of PKC. RACK7 (receptor for activated C kinase 7), also known as ZMYND8 (zinc finger MYND domain-containing protein 8), PRKCBP1 (protein kinase C (PKC)-binding protein 1) or PR02893, is a widely expressed protein with predominant expression in pancreas, lung, placenta and brain. RACK7 contains one bromodomain, one PHD-type zinc finger, one MYND-type zinc finger and one PWWP domain. Via its C-terminus, RACK7 interacts with PKC β and is believed to play a role in PKC signaling and function as a transcription regulator. In response to DNA damage, RACK7 is phosphorylated by ATM or ATR. In addition, multiple isoforms exist for RACK7.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ZMYND8 (human) mapping to 20q13.12; Prkcbp1 (mouse) mapping to 2 H3.

SOURCE

RACK7 (K-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RACK7 of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-85862 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RACK7 (K-18) is recommended for detection of RACK7 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); non cross-reactive with RACK1.

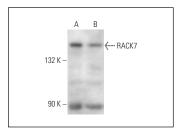
RACK7 (K-18) is also recommended for detection of RACK7 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for RACK7 siRNA (h): sc-76337, RACK7 siRNA (m): sc-152674, RACK7 shRNA Plasmid (h): sc-76337-SH, RACK7 shRNA Plasmid (m): sc-152674-SH, RACK7 shRNA (h) Lentiviral Particles: sc-76337-V and RACK7 shRNA (m) Lentiviral Particles: sc-152674-V.

Molecular Weight of RACK7: 132 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, K-562 nuclear extract: sc-2130 or Jurkat nuclear extract: sc-2132.

DATA



RACK7 (K-18): sc-85862. Western blot analysis of RACK7 expression in Jurkat (**A**) and K-562 (**B**) nuclear extracts

RESEARCH USE

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

PROTOCOLS

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



Try **RACK7 (RF-9): sc-100824**, our highly recommended monoclonal alternative to RACK7 (K-18).