

PRAS40 (199H2R): sc-517639

BACKGROUND

Akt, also known as protein kinase B is one of the major downstream targets of the phosphatidylinositol 3-kinase pathway. This protein kinase has been implicated in Insulin signaling, stimulation of cellular growth, inhibition of apoptosis and transformation of cells. The proline-rich Akt substrate PRAS40, also designated AKT1S1, becomes phosphorylated by activated Akt on Ser or Thr residues in the motif RXRXX(S/T). Phosphorylated PRAS40 subsequently binds 14-3-3 in a sequence-specific manner, thereby inducing such changes as alteration of protein subcellular localization and regulation of intrinsic enzymatic activity. Studies also suggest that PRAS40 phosphorylation and its interaction with pAkt and 14-3-3 may play an important role in neuroprotection mediated by NGF in apoptotic neuronal cell death after cerebral ischemia. PRAS40 maps to human chromosome 19q13.33.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: AKT1S1 (human) mapping to 19q13.33; Akt1s1 (mouse) mapping to 7 B4.

SOURCE

PRAS40 (199H2R) is a mouse monoclonal antibody raised against recombinant PRAS40 of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

PRAS40 (199H2R) is recommended for detection of PRAS40 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000).

Suitable for use as control antibody for PRAS40 siRNA (h): sc-44635, PRAS40 siRNA (m): sc-152440, PRAS40 shRNA Plasmid (h): sc-44635-SH, PRAS40 shRNA Plasmid (m): sc-152440-SH, PRAS40 shRNA (h) Lentiviral Particles: sc-44635-V and PRAS40 shRNA (m) Lentiviral Particles: sc-152440-V.

Molecular Weight of PRAS40: 40 kDa.

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.

STORAGE

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

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.