

ANKS6 (A-1): sc-515124

BACKGROUND

ANKS6 (ankyrin repeat and sterile α motif domain containing 6), also known as ankyrin repeat domain-containing protein 14, SAMD6 (sterile α motif domain-containing protein 6), SamCystin or PKDR1, is an 871 amino acid phosphoprotein that contains 11 ANK repeats, one SAM domain and exists as 3 alternatively spliced isoforms. Encoded by a gene that maps to human chromosome 9q22.33, ANKS6 is necessary for renal function and is linked to renal cyst formation in polycystic kidney disease. ANKS6 interacts with BICC1, another protein linked to polycystic kidney disease, and both co-localize to the same cell region. ANKS6 is involved in protein-protein interactions with both itself as well as BICC1, and both proteins function in a molecular pathway that is linked to cystogenesis. ANKS6 may also be associated with dental anomalies.

REFERENCES

1. Brown, J.H., et al. 2005. Missense mutation in sterile α motif of novel protein SamCystin is associated with polycystic kidney disease in (cy/+) rat. *J. Am. Soc. Nephrol.* 16: 3517-3526.
2. Wu, M., et al. 2007. Everolimus retards cyst growth and preserves kidney function in a rodent model for polycystic kidney disease. *Kidney Blood Press. Res.* 30: 253-259.
3. Kaisaki, P.J., et al. 2008. Genomic organization and mutation screening of the human ortholog of Pkdr1 associated with polycystic kidney disease in the rat. *Eur. J. Med. Genet.* 51: 325-331.
4. Vieira, A.R., et al. 2008. Candidate gene/loci studies in cleft lip/palate and dental anomalies finds novel susceptibility genes for clefts. *Genet. Med.* 10: 668-674.

CHROMOSOMAL LOCATION

Genetic locus: ANKS6 (human) mapping to 9q22.33; Anks6 (mouse) mapping to 4 B1.

SOURCE

ANKS6 (A-1) is a mouse monoclonal antibody raised against amino acids 16-300 mapping at the N-terminus of ANKS6 of human origin.

PRODUCT

Each vial contains 200 μ g IgG γ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ANKS6 (A-1) is available conjugated to agarose (sc-515124 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515124 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515124 PE), fluorescein (sc-515124 FITC), Alexa Fluor[®] 488 (sc-515124 AF488), Alexa Fluor[®] 546 (sc-515124 AF546), Alexa Fluor[®] 594 (sc-515124 AF594) or Alexa Fluor[®] 647 (sc-515124 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-515124 AF680) or Alexa Fluor[®] 790 (sc-515124 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

ANKS6 (A-1) is recommended for detection of ANKS6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Suitable for use as control antibody for ANKS6 siRNA (h): sc-92725, ANKS6 siRNA (m): sc-141121, ANKS6 shRNA Plasmid (h): sc-92725-SH, ANKS6 shRNA Plasmid (m): sc-141121-SH, ANKS6 shRNA (h) Lentiviral Particles: sc-92725-V and ANKS6 shRNA (m) Lentiviral Particles: sc-141121-V.

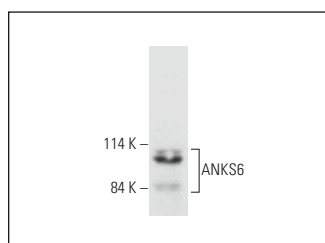
Molecular Weight of ANKS6: 92 kDa.

Positive Controls: Caco-2 cell lysate: sc-2262 or P19 cell lysate: sc-24760.

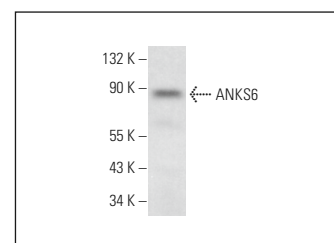
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



ANKS6 (A-1): sc-515124. Western blot analysis of ANKS6 expression in Caco-2 whole cell lysate.



ANKS6 (A-1): sc-515124. Western blot analysis of ANKS6 expression in P19 whole cell lysate.

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.