



Kap (G-14): sc-161756

BACKGROUND

Kap (kidney androgen-regulated protein) is a 121 amino acid gene product that pared down to a 103 amino acid secreted protein. The Kap promoter is specific to proximal tubules in the kidney and is regulated by androgen, likely at an L1 repeat near the promoter. Androgen, or testoids, are hormonal compounds that, through androgen receptor binding, stimulates or controls the development and maintenance of male characteristics. Kap expression has been shown to be critical for cardiovascular-renal homeostasis. Kap overexpression has been associated with hypertension likely due to increased oxidative stress. The interaction of androgen with the Kap promoter implies a sex-influenced pathway to blood pressure regulation and will likely be of use clinically.

REFERENCES

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2. Tzortzaki, E.G., et al. 2002. Gender- and age-dependent changes in kidney androgen protein mRNA expression in a knockout mouse model for nephrolithiasis. *J. Histochem. Cytochem.* 50: 1663-1669.
3. Lavoie, J.L., et al. 2004. Increased blood pressure in transgenic mice expressing both human Renin and angiotensinogen in the renal proximal tubule. *Am. J. Physiol. Renal Physiol.* 286: F965-F971.
4. Malstrom, S.E., et al. 2004. The characterization and hormonal regulation of kidney androgen-regulated protein (Kap)-Luciferase transgenic mice. *Toxicol. Sci.* 79: 266-277.
5. Teixidó, N., et al. 2006. CCAAT/enhancer binding protein-mediated role of thyroid hormone in the developmental expression of the kidney androgen-regulated protein gene in proximal convoluted tubules. *Mol. Endocrinol.* 20: 389-404.
6. Fan, L., et al. 2008. Identification and characterization of the minimal androgen-regulated kidney-specific kidney androgen-regulated protein gene promoter. *Acta Biochim. Biophys. Sin.* 40: 979-988.
7. Li, H., et al. 2008. An androgen-inducible proximal tubule-specific CRE recombinase transgenic model. *Am. J. Physiol. Renal Physiol.* 294: F1481-F1486.
8. Tornavaca, O., et al. 2009. Kidney androgen-regulated protein transgenic mice show hypertension and renal alterations mediated by oxidative stress. *Circulation* 119: 1908-1917.
9. Li, S., et al. 2009. Transgenic expression of proximal tubule peroxisome proliferator-activated receptor- α in mice confers protection during acute kidney injury. *Kidney Int.* 76: 1049-1062.

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.

CHROMOSOMAL LOCATION

Genetic locus: Kap (mouse) mapping to 6 G1.

SOURCE

Kap (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Kap of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-161756 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Kap (G-14) is recommended for detection of Kap of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 Kap siRNA (m): sc-146339, Kap shRNA Plasmid (m): sc-146339-SH and Kap shRNA (m) Lentiviral Particles: sc-146339-V.

Molecular Weight of Kap: 14 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

PROTOCOLS

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