BACKGROUND
PTOV1 (prostate tumor overexpressed 1), also known as ACID2, is a 416 amino acid protein that shuttles between the cytoplasm and the nucleus in a cell cycle-dependent manner. Considered a mitogenic protein, PTOV1 is expressed in brain, heart, kidney, liver, placenta, skeletal muscle and small intestine. PTOV1 is induced by testosterone and is required for Flotillin-1 activation. PTOV1 is suggested to play a role in transcriptional activation and promotes cell proliferation. PTOV1 may regulate proliferation of neointimal VSMCs (vascular smooth muscle cells) and possibly promotes early atherosclerosis in the male aorta. A potential marker for prostate cancer, PTOV1 is a member of the mediator complex subunit 25 family and exists as 3 alternatively spliced isoforms. PTOV1 is encoded by a gene located on human chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes.

REFERENCES


CHROMOSOMAL LOCATION
Genetic locus: PTOV1 (human) mapping to 19q13.33; Ptov1 (mouse) mapping to 7 B4.

SOURCE
PTOV1 (E-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PTOV1 of human origin.

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-240796 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS
PTOV1 (E-13) is recommended for detection of PTOV1 of mouse, rat and human 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).

PTOV1 (E-13) is also recommended for detection of PTOV1 in additional species, including equine.

Suitable for use as control antibody for PTOV1 siRNA (h): sc-97490, PTOV1 siRNA (m): sc-152579, PTOV1 shRNA Plasmid (h): sc-97490-SH, PTOV1 shRNA Plasmid (m): sc-152579-SH, PTOV1 shRNA (h) Lentiviral Particles: sc-97490-V and PTOV1 shRNA (m) Lentiviral Particles: sc-152579-V. Molecular Weight of PTOV1: 58 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.

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 or our catalog for detailed protocols and support products.