

## PECI (P-19): sc-82692

### BACKGROUND

PECI (peroxisomal  $\Delta^3,\Delta^2$ -enoyl-CoA isomerase), also known as DRS1, ACBD2 or HCA88, is a 359 amino acid protein that localizes to the peroxisomal matrix and contains one ACB (acyl-CoA-binding) domain. Expressed abundantly in liver, heart and skeletal muscle, PECI functions to catalyze the isomerization of both 3-*cis* and 3-*trans* double bonds into the 2-*trans* form in a range of enoyl-CoA species, playing an important role in the  $\beta$ -oxidation of unsaturated fatty acids. The gene encoding PECI maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: PECI (human) mapping to 6p25.2; Peci (mouse) mapping to 13 A3.3.

### SOURCE

PECI (P-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PECI 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  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-82692 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

PECI (P-19) is recommended for detection of PECI of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

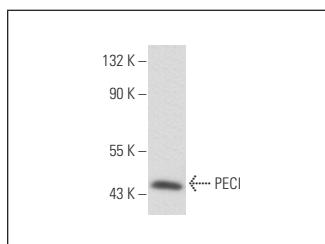
Suitable for use as control antibody for PECI siRNA (h): sc-76104, PECI siRNA (m): sc-76105, PECI shRNA Plasmid (h): sc-76104-SH, PECI shRNA Plasmid (m): sc-76105-SH, PECI shRNA (h) Lentiviral Particles: sc-76104-V and PECI shRNA (m) Lentiviral Particles: sc-76105-V.

Molecular Weight of PECI: 39 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

### DATA



PECI (P-19): sc-82692. Western blot analysis of PECI expression in 293T whole cell lysate.

### RESEARCH USE

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

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Try **PECI (32): sc-136374**, our highly recommended monoclonal alternative to PECI (P-19).