

PECR (Y-20): sc-168928

BACKGROUND

PECR (peroxisomal trans-2-enoyl-CoA reductase), also known as TERP, DCRPP (2,4-dienoyl-CoA reductase-related protein), PVIARL, HPDHASE or SDR29C1 (short chain dehydrogenase/reductase family 29C, member 1), is a 303 amino acid protein that contains a C-terminal type I peroxisomal targeting signal (AKL) and belongs to the short-chain dehydrogenases/reductases (SDR) family. Encoded by a gene that maps to human chromosome 2q35, PECR localizes to peroxisome and exists as two alternatively spliced isoforms. PECR is expressed at high levels in liver and kidney, and is found at lower levels in heart, skeletal muscle and other tissues. PECR participates in chain elongation of fatty acids, binding activity and NADPH-specific 2-enoyl-CoA reductase activity, acting as the key enzyme for a proposed peroxisomal chain elongation pathway. PECR is a potential susceptibility locus for rheumatoid arthritis.

REFERENCES

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3. Kurochkin, I.V., et al. 2005. Sequence-based discovery of the human and rodent peroxisomal proteome. *Appl. Bioinformatics* 4: 93-104.
4. Gloerich, J., et al. 2006. Peroxisomal *trans*-2-enoyl-CoA reductase is involved in phytol degradation. *FEBS Lett.* 580: 2092-2096.
5. Silva, G.L., et al. 2009. Genetic susceptibility loci in rheumatoid arthritis establish transcriptional regulatory networks with other genes. *Ann. N.Y. Acad. Sci.* 1173: 521-537.
6. Treutlein, J., et al. 2009. Genome-wide association study of alcohol dependence. *Arch. Gen. Psychiatry.* 66: 773-784.
7. Persson, B., et al. 2009. The SDR (short-chain dehydrogenase/reductase and related enzymes) nomenclature initiative. *Chem. Biol. Interact.* 178: 94-98.

CHROMOSOMAL LOCATION

Genetic locus: PECR (human) mapping to 2q35.

SOURCE

PECR (Y-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PECR 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.

PROTOCOLS

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

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-168928 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PECR (Y-20) is recommended for detection of PECR of 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).

Suitable for use as control antibody for PECR siRNA (h): sc-94883, PECR shRNA Plasmid (h): sc-94883-SH and PECR shRNA (h) Lentiviral Particles: sc-94883-V.

Molecular Weight of PECR isoform 1: 33 kDa.

Molecular Weight of PECR isoform 2: 17 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.

RESEARCH USE

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