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Anti-PECI Antibody

Catalog # AP51175

Product Information

Application	WB, IHC, IF/IC
Primary Accession	O75521
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	43585

Additional Information

Gene ID	10455
Other Names	DRS1; HCA88; PECI; Enoyl-CoA delta isomerase 2 mitochondrial; DRS-1; Delta(3), delta(2)-enoyl-CoA isomerase; D3, D2-enoyl-CoA isomerase; Diazepam-binding inhibitor-related protein 1; DBI-related protein 1; Dodecenoyl-CoA isomerase; Hepatocellular carcinoma-associated antigen 88; Peroxisomal 3, 2-trans-enoyl-CoA isomerase; pECI; Renal carcinoma antigen NY-REN-1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PECI. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

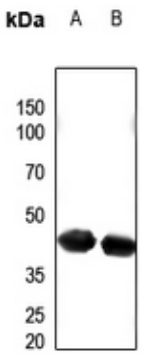
Name	ECI2
Synonyms	DRS1, HCA88, PECI {ECO:0000303|PubMed:10
Function	Auxiliary enzyme in the beta-oxidation of mono- and polyunsaturated fatty acids (PubMed:10419495). Together with the 2,4- dienoyl-CoA reductase (DECR) and the Delta(3,5)-Delta(2,4)-dienoyl-CoA isomerase (ECH), they allow the reentrance of the enoyl-CoA into the beta-oxidation cycle (PubMed:10419495). Able to isomerize both 3-cis (3Z) and 3-trans (3E) double bonds into the 2-trans (2E) form in a range of fatty enoyl-CoA species, with a preference for (3E)-enoyl-CoAs over (3Z)-enoyl-CoAs (PubMed:10419495, PubMed:25515061). Based on its established catalytic mechanism, it is predicted to act also on other fatty acids besides those tested experimentally

	(Probable).
Cellular Location	[Isoform 1]: Mitochondrion {ECO:0000250|UniProtKB:Q5XIC0}
Tissue Location	Abundant in heart, skeletal muscle and liver. Expressed in CD34(+) T-cells and CD34(+) bone marrow cells

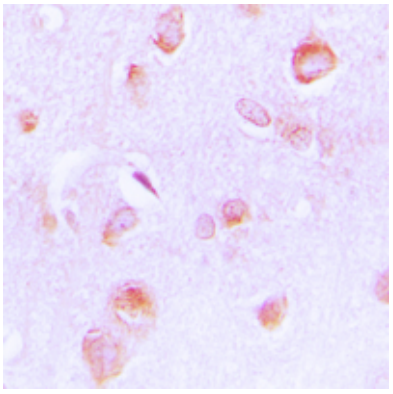
References

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Mungall A.J.,et al.Nature 425:805-811(2003).
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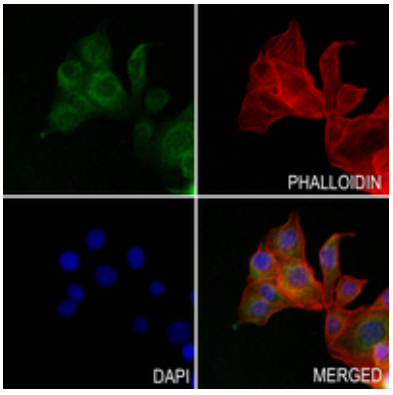
Images



Western blot analysis of PECI expression in HEK293T (A), Hela (B) whole cell lysates. (Predicted band size: 43 kD; Observed band size: 40 kD)



Immunohistochemical analysis of PECI staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of PECI staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.