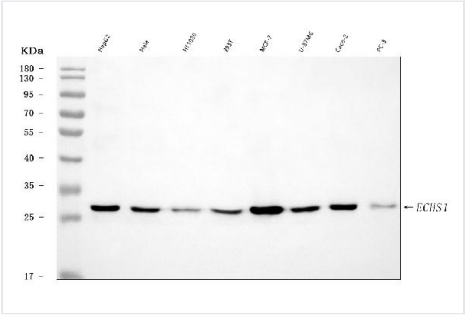
ECHS1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

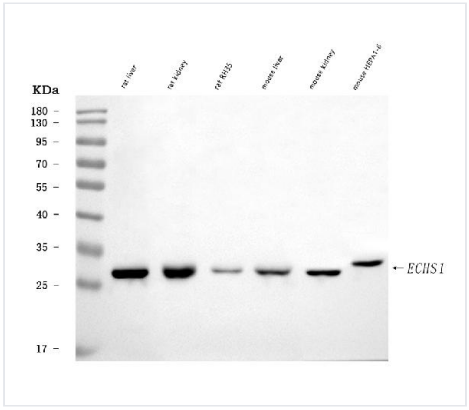
Product Name	ECHS1, Polyclonal Antibody
Full Product Name	Anti-ECHS1 Antibody Picoband
Product Gene Name	anti-ECHS1 antibody
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Purity/Purification	Immunogen affinity purified.
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (lot specific)
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.
Molecular Weight	290
Chromosome Location	Chromosome: 10; NC_000010.10 (135175987..135186908, complement). Location: 10q26.2-q26.3
OMIM	602292
3D Structure	ModBase 3D Structure for P30084
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E Coli-derived human ECHS1 recombinant protein (Position: R12-Q290).
Product Categories/Family for anti-ECHS1 antibody	Primary Antibodies, Rabbit Polyclonal Antibodies
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Applications Tested/Suitable for anti-ECHS1 antibody	Western Blot (WB), Immunohistochemistry (IHC), Immunocytochemistry (ICC), Immunofluorescence (IF), Flow Cytometry (FC/FACS), ELISA (EIA)
Application Notes for anti-ECHS1 antibody	WB: 0.25-0.5 ug/ml, Human, Mouse, Rat IHC-P: 2-5 ug/ml, Human, Rat ICC/IF: 5 ug/ml, Human FC/FACS: 1-3 ug/1x10^6 cells, Human Direct ELISA: 0.1-0.5 ug/ml, Human Tested Species: In-house tested species with positive results. Enhanced Chemiluminescent Kit with anti-Rabbit IgG (#MBS176460) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (#MBS176453) for IHC(P) and ICC.
Related Product Information for anti-ECHS1 antibody	Enoyl Coenzyme A hydratase, short chain, 1, mitochondrial, also known as ECHS1, is a human gene. The protein encoded by this gene functions in the second step of the mitochondrial fatty acid beta-oxidation pathway. It catalyzes the hydration of 2-trans-enoyl-coenzyme A (CoA) intermediates to L-3-hydroxyacyl-CoAs. The gene product is a member of the hydratase/isomerase superfamily. It localizes to the mitochondrial matrix. Transcript variants utilizing alternative transcription initiation sites have been described in the literature.

Other Notes	Small volumes of anti-ECHS1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for ECHS1 purchase	MBS1755369 is an antibody targeting ECHS1. Also known as Anti-ECHS1 Antibody Picoband. Reactive in Human, Mouse, Rat. Host: Rabbit.



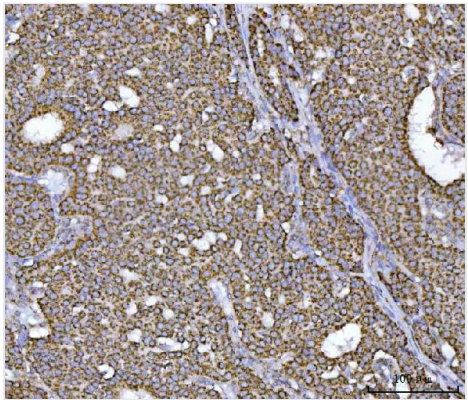
Western Blot (WB) of anti-ECHS1 antibody

Figure 1. Western blot analysis of ECHS1 using anti-ECHS1 antibody (MBS1755369).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human HepG2 whole cell lysates,Lane 2: human Hela whole cell lysates,Lane 3: human HT1080 whole cell lysates,Lane 4: human 293T whole cell lysates,Lane 5: human MCF-7 whole cell lysates,Lane 6: human U-87MG whole cell lysates,Lane 7: human CACO-2 whole cell lysates,Lane 8: human PC-3 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ECHS1 antigen affinity purified polyclonal antibody (#MBS1755369) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for ECHS1 at approximately 29 kDa. The expected band size for ECHS1 is at 29 kDa.



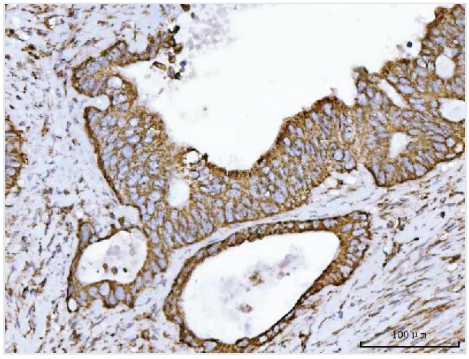
Western Blot (WB) of anti-ECHS1 antibody

Figure 2. Western blot analysis of ECHS1 using anti-ECHS1 antibody (MBS1755369).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: rat liver tissue lysates,Lane 2: rat kidney tissue lysates,Lane 3: rat RH35 whole cell lysates,Lane 4: mouse liver tissue lysates,Lane 5: mouse kidney tissue lysates,Lane 6: mouse HEPA1-6 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ECHS1 antigen affinity purified polyclonal antibody (#MBS1755369) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for ECHS1 at approximately 29 kDa. The expected band size for ECHS1 is at 29 kDa.



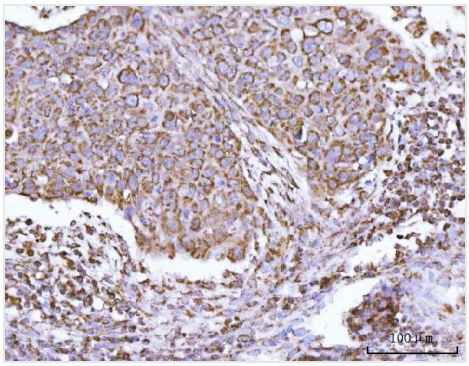
Immunohistochemistry (IHC) of anti-ECHS1 antibody

Figure 3. IHC analysis of ECHS1 using anti-ECHS1 antibody (MBS1755369).ECHS1 was detected in a paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-ECHS1 Antibody (MBS1755369) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



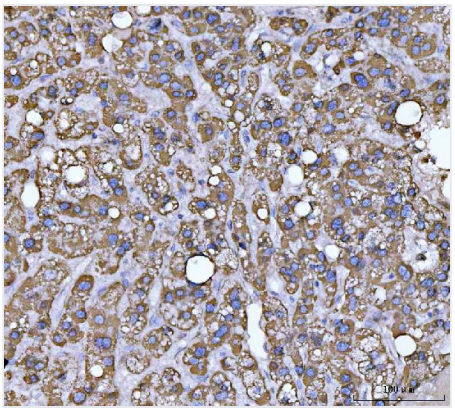
Immunohistochemistry (IHC) of anti-ECHS1 antibody

Figure 4. IHC analysis of ECHS1 using anti-ECHS1 antibody (MBS1755369).ECHS1 was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-ECHS1 Antibody (MBS1755369) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



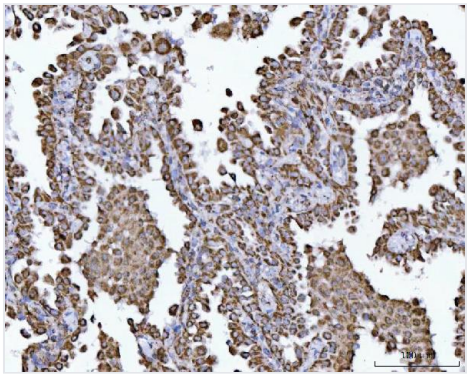
Immunohistochemistry (IHC) of anti-ECHS1 antibody

Figure 5. IHC analysis of ECHS1 using anti-ECHS1 antibody (MBS1755369).ECHS1 was detected in a paraffin-embedded section of human esophageal squamous carcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-ECHS1 Antibody (MBS1755369) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



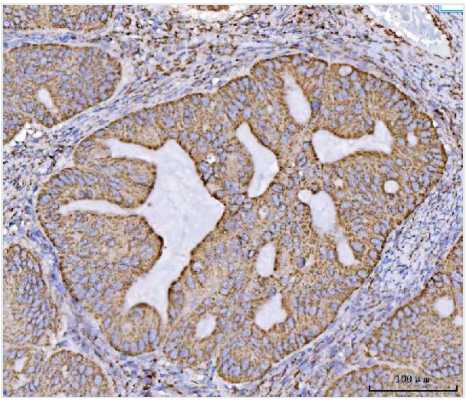
Immunohistochemistry (IHC) of anti-ECHS1 antibody

Figure 6. IHC analysis of ECHS1 using anti-ECHS1 antibody (MBS1755369).ECHS1 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-ECHS1 Antibody (MBS1755369) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



Immunohistochemistry (IHC) of anti-ECHS1 antibody

Figure 7. IHC analysis of ECHS1 using anti-ECHS1 antibody (MBS1755369).ECHS1 was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-ECHS1 Antibody (MBS1755369) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



Immunohistochemistry (IHC) of anti-ECHS1 antibody

Figure 8. IHC analysis of ECHS1 using anti-ECHS1 antibody (MBS1755369).ECHS1 was detected in a paraffin-embedded section of human ovarian cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-ECHS1 Antibody (MBS1755369) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ECHS1. It may not necessarily be applicable to this product.

NCBI GI #	194097323
NCBI GeneID	1892
NCBI Accession #	NP_004083.3
UniProt Primary Accession #	P30084
UniProt Secondary Accession #	O00739; Q5VWY1; Q96H54
UniProt Related Accession #	P30084
GenBank Nucleotide #	NM_004092.3
NCBI Official Full Name	enoyl-CoA hydratase, mitochondrial

NCBI Official Synonym Full Names	enoyl CoA hydratase, short chain, 1, mitochondrial
NCBI Official Symbol	ECHS1
NCBI Official Synonym Symbols	SCEH
UniProt Protein Name	Enoyl-CoA hydratase, mitochondrial
UniProt Synonym Protein Names	Enoyl-CoA hydratase 1; Short-chain enoyl-CoA hydratase
Protein Family	Enoyl-CoA hydratase
UniProt Gene Name	ECHS1
UniProt Synonym Gene Names	SCEH
UniProt Entry Name	ECHM_HUMAN
NCBI Protein Information	enoyl-CoA hydratase, mitochondrial; enoyl-CoA hydratase 1; short-chain enoyl-CoA hydratase; enoyl Coenzyme A hydratase, short chain, 1, mitochondrial
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