

Recombinant Human ACO1 cell lysate

Cat. No. ACO1-510HCL **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human ACO1 / irp1 derived in Baculovirus-Insect cells. The whole cell lysate is provided in 1X Sample Buffer. Browse all transfected cell lysate positive controls
Species	Human
Source	Insect Cells
Preparation method	Transfected cells were cultured for 48hrs before collection. The cells were lysed in modified RIPA buffer with cocktail of protease inhibitors. Cell debris was removed by centrifugation and then centrifuged to clarify the lysate. The cell lysate was boiled for 5 minutes in 1 x SDS sample buffer (50 mM Tris-HCl pH 6.8, 12.5% glycerol, 1% sodium dodecylsulfate, 0.01% bromophenol blue) containing 5% b-mercaptoethanol, and lyophilized.
Lysis buffer	Modified RIPA Lysis Buffer: 50 mM Tris-HCl pH 7.4, 150 mM NaCl, 1mM EDTA, 1% Triton X-100, 0.1% SDS, 1% Sodium deoxycholate, 1mM PMSF
Quality control Testing	12.5% SDS-PAGE Stained with Coomassie Blue
Recommended Usage	1. Centrifuge the tube for a few seconds and ensure the pellet at the bottom of the tube. 2. Re-dissolve the pellet using 200µL pure water and boiled for 2-5 min. 3. Store it at -80°C. Recommend to aliquot the cell lysate into smaller quantities for optimal storage. Avoid repeated freeze-thaw cycles. Notes: The lysate is ready to load on SDS-PAGE for Western blot application. If dissociating conditions are required, add

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reducing agent prior to heating.

Stability

Samples are stable for up to twelve months from date of receipt at -80°C

Storage Buffer

50 mM Tris-HCl pH 7.4, 150 mM NaCl, 1mM EDTA, 1% Triton X-100, 0.1% SDS, 1% Sodium deoxycholate, 1mM PMSF

Storage Instruction

Lysate samples are stable for 12 months from date of receipt when stored at -80°C. Avoid repeated freeze-thaw cycles. Prior to SDS-PAGE fractionation, boil the lysate for 5 minutes.

GENE INFORMATION

Gene Name

[ACO1 aconitase 1, soluble \[Homo sapiens \]](#)

Official Symbol

ACO1

Synonyms

ACO1; aconitase 1, soluble; IREB1; cytoplasmic aconitate hydratase; IREBP; IRP1; IRE-BP 1; aconitate hydratase; citrate hydro-lyase; iron regulatory protein 1; ferritin repressor protein; iron-responsive element binding protein 1; iron-responsive element-binding protein 1; ACONS; IREBP1;

Gene ID

[48](#)

mRNA Refseq

[NM_002197](#)

Protein Refseq

[NP_002188](#)

MIM

[100880](#)

UniProt ID

[P21399](#)

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Chromosome Location	9p21.1
Pathway	Citrate cycle (TCA cycle), organism-specific biosystem; Citrate cycle (TCA cycle), conserved biosystem; Citrate cycle, first carbon oxidation, oxaloacetate =>2-oxoglutarate, organism-specific biosystem; Citrate cycle, first carbon oxidation, oxaloacetate => 2-oxoglutarate, conserved biosystem; Glyoxylate and dicarboxylate metabolism, organism-specific biosystem;
Function	4 iron, 4 sulfur cluster binding; 4 iron, 4 sulfur cluster binding; RNA binding; RNA binding; aconitate hydratase activity; aconitate hydratase activity; citrate hydro-lyase (cis-aconitate-forming) activity; iron-responsive element binding; iron-responsive element binding; isocitrate hydro-lyase (cis-aconitate-forming) activity; lyase activity; mRNA 5-UTR binding; metal ion binding; protein binding;