



# Anti malate dehydrogenase (CitH)

## Background

CitH (or MDH) is a malate dehydrogenase, catalyzing a reaction between L-malate and oxaloacetate [EC:1.1.1.37]. CitH/MDH from a unicellular cyanobacterium *Synechocystis* sp. PCC 6803 catalyzes more efficient in the reductive reaction (from oxaloacetate to malate) in the TCA cycle. Overexpression of *citH* increases the bioproduction of succinate, fumarate, and malate from *Synechocystis* cells during fermentation.

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Product type	Primary Antibody
Immunogen	Synthetic peptide (CAGLPRRPGMSRDDLLGK)
Raised in	Rabbit
Source	Serum
Purification	Immunogen affinity purified
Buffer	Phosphate Buffered Saline (PBS) with 50 % glycerol and ProClin 300 (15 ppm)
Concentration	1.88 mg/mL
Volume	100 uL
Label	Unlabeled
Specificity	<i>Synechocystis</i> sp. PCC 6803 CitH
Storage	Store at -20 °C
Recommended Dilutions	Western blotting (1 : 20000) Other applications have not been tested or not reactive. Optimal dilutions/concentrations should be determined by the end user.

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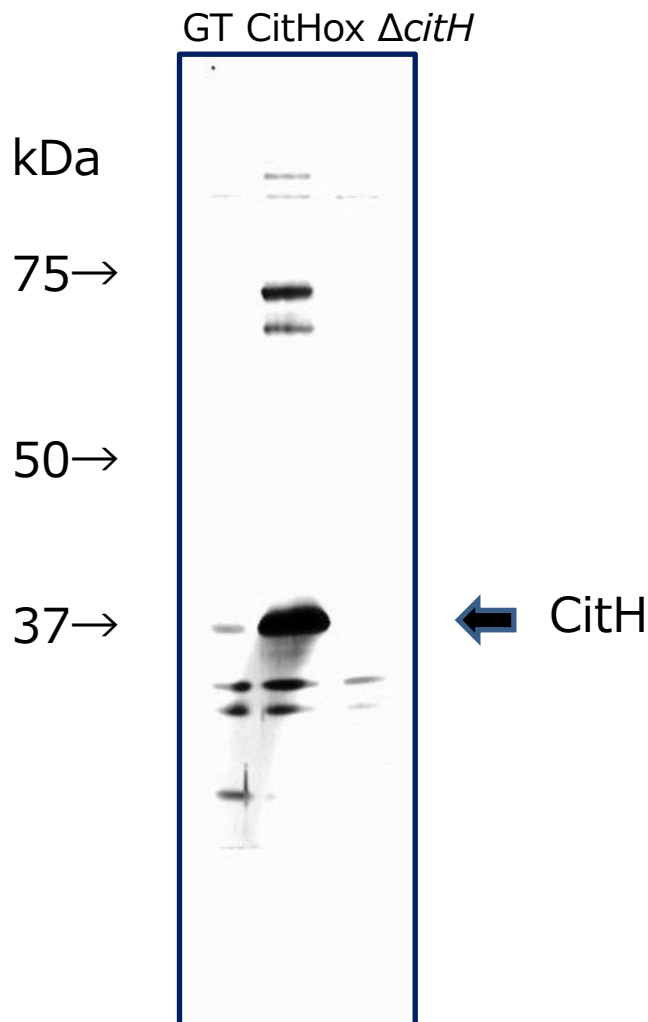


Fig 1. Western blot analysis of CitH in glucose-tolerant strain of *Synechocystis* sp. PCC 6803 (GT), in *citH* overexpressing strain (CitHox) and in *citH* deletion mutant ( $\Delta citH$ )

Predicted molecular weight : 34.3 kDa

Primary antibody : anti CitH antibody at 1:20000 dilution

Secondary antibody : Alkaline phosphatase conjugated anti rabbit IgG antibody at 1:20000 dilution

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