

Product: Anti-Idh (isocitrate dehydrogenase)

Product no: AS06 203A

Product Information

Antibody clonality: Polyclonal

Raised in: Rabbit

Purity: Affinity purified IgG

Concentration: 1 µg/µl

Quantity: 180 µl

Antibody form: Lyophilized. For reconstitution please add 180 µl of sterile water. Please, remember to spin tubes briefly prior to opening them to avoid any losses that might occur from liquid or lyophilized material adhering to the cap or sides of the tubes.

Storage instructions: -20°C or -80°C long Term storage (years). Please, avoid freezing and thawing of antibodies. Make aliquots instead.

Plant NADH dependent isocitrate dehydrogenase enzyme is located in mitochondrial matrix. This enzyme is classified as an oxidoreductase and its function is to catalyze a reaction in the citric acid cycle, specifically the sequential dehydrogenation and decarboxylation of isocitrate to form a-ketoglutarate. It removes hydrogens from its substrate, isocitrate. In addition to this process, it functions as a decarboxylase, removing a CO₂ from the six-carbon substrate to form a five-carbon product mentioned above as a-ketoglutarate. There are two forms of this enzyme NADP⁺ and NAD⁺ dependent.

Immunogen: Mixture of two peptides conserved in Idh from all higher plants to *Chlamydomonas reinhardtii*, mitochondrial, NADH dependent isocitrate dehydrogenase subunits. Not conserved in NADPH dependent anzymes. Partially conserved across eukaryotic Idh subunits. Some conservation across bacterial which contain the NAD-dependent form of Idh (as opposed to the NADP-dependent form).

Background

Application information:

Western Blot: 1: 5 000 with ECL system

Reactivity: Pure mitochondria of: *Arabidopsis thaliana*, *Pisum sativum* and *Solanum tuberosum*.

MW: 45 kDa

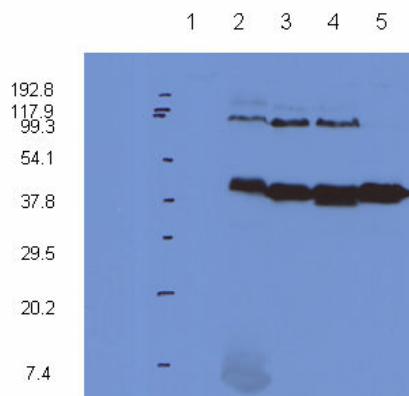


Figure description:

- 1: Total extract *A. thaliana* (200µg protein)
- 2: Fraction enriched with mitochondria *A. thaliana*
- 3: Pure mitochondria *A. thaliana*
- 4: Pure mitochondria *P. sativum*
- 5: Pure mitochondria *S. tuberosum*

Description of experimental conditions:

After SDS-PAGE gel electrophoresis samples have been transferred to nitrocellulose membrane. Blocking has been done in 5% milk powder in TBS followed by incubation with primary antibodies for 1 hour and 30 minutes in RT After incubation with secondary antibodies reaction has been developed using ECL reagent (GE Healthcare)

* Band detected at ca. 90 kDa is suspected to be a dimer of Idh, since this band is depleted upon peptide competition experiment.

Antibodies are intended for the research use only not for diagnostic or therapeutic use.

Product support: inquiry@agrisera.com, <http://www.agrisera.com/protocols/protocols.shtml>