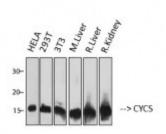


## **Anti-CYCS** antibody



Western Blot (WB) analysis of 1. HELA 2. 293T 3. 3T3 4. Mouse liver 5. Rat liver 6. Rat kidney cells using CYCS Monoclonal Antibody. (STJ97419)



**Description** CYCS is a protein encoded by the CYCS gene which is approximately

11,7 kDa. CYCS is localised to the mitochondrion intermembrane space. It is involved in the TNFR1 pathway, respiratory electron transport and apoptosis modulation and signalling. It is a small heme protein that functions as a central component of the electron transport chain in mitochondria. It associates with the inner membrane of the mitochondrion where it accepts electrons from cytochrome b and transfers them to the cytochrome oxidase complex. It is also involved in the initiation of apoptosis. CYCS is expressed in the nervous system, liver, kidney, heart and muscle. Mutations in the CYCS gene may result in orbital granuloma. STJ97419 was developed from clone 4B10 and was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen. The antibody detects endogenous CYCS protein.

Model STJ97419

**Host** Mouse

**Reactivity** Avian, Human, Mouse, Rat

**Applications** IHC, WB

Immunogen Recombinant Protein

**Gene ID** <u>54205</u>

Gene Symbol CYCS

**Dilution range** WB 1:1000-5000IHC 1:500-1000

**Specificity** The antibody detects endogenous CYCS protein.

**Purification** The antibody was affinity-purified from mouse ascites by affinity-

chromatography using epitope-specific immunogen.

Clone ID 4B10

**Note** For Research Use Only (RUO).

**Protein Name** Cytochrome c

**Clonality** Monoclonal

**Conjugation** Unconjugated

Isotype IgG1

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:19986OMIM:123970

**Alternative Names** Cytochrome c

**Function** Electron carrier protein. The oxidized form of the cytochrome c heme group

can accept an electron from the heme group of the cytochrome c1 subunit of cytochrome reductase. Cytochrome c then transfers this electron to the cytochrome oxidase complex, the final protein carrier in the mitochondrial electron-transport chain.; Plays a role in apoptosis. Suppression of the antiapoptotic members or activation of the pro-apoptotic members of the Bcl-2 family leads to altered mitochondrial membrane permeability resulting in release of cytochrome c into the cytosol. Binding of cytochrome c to Apaf-1 triggers the activation of caspase-9, which then accelerates apoptosis by

activating other caspases.

**Cellular Localization** Mitochondrion intermembrane space. Loosely associated with the inner

membrane.

**Post-translational** 

Modifications

Binds 1 heme group per subunit.; Phosphorylation at Tyr-49 and Tyr-98 both reduce by half the turnover in the reaction with cytochrome c oxidase, down-

regulating mitochondrial respiration.

St John's Laboratory Ltd

**F** +44 (0)207 681 2580 **T** +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com