

# Product Datasheet

## CDS1 Antibody (2D10) - Azide and BSA Free H00001040-M01

Unit Size: 0.1 mg

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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**H00001040-M01**

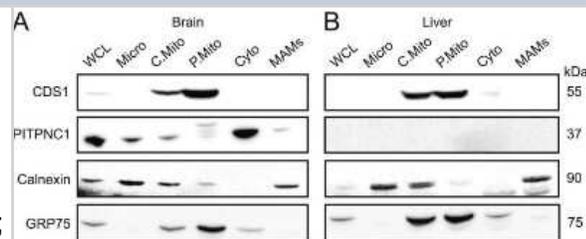
CDS1 Antibody (2D10) - Azide and BSA Free

| <b>Product Information</b>         |   |
|------------------------------------|---|
| <b>Unit Size</b>                   | 0.1 mg  |
| <b>Concentration</b>               | Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.  |
| <b>Storage</b>                     | Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.  |
| <b>Clonality</b>                   | Monoclonal  |
| <b>Clone</b>                       | 2D10  |
| <b>Preservative</b>                | No Preservative   |
| <b>Isotype</b>                     | IgG1 Kappa  |
| <b>Purity</b>                      | IgG purified  |
| <b>Buffer</b>                      | In 1x PBS, pH 7.4   |
| <b>Product Description</b>         |   |
| <b>Description</b>                 | Quality control test: Antibody Reactive Against Recombinant Protein.  |
| <b>Host</b>                        | Mouse   |
| <b>Gene ID</b>                     | 1040  |
| <b>Gene Symbol</b>                 | CDS1  |
| <b>Species</b>                     | Human, Rat  |
| <b>Reactivity Notes</b>            | Rat reactivity reported from customer review.   |
| <b>Specificity/Sensitivity</b>     | CDS1 - CDP-diacylglycerol synthase (phosphatidate cytidyltransferase) 1 (2D10)  |
| <b>Immunogen</b>                   | CDS1 (NP_001254, 1 a.a. ~ 98 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.<br>MLELRHRGSCPGPREAVSPPHREGEAAGGDHETESTSDKETDIDDRYGDLDLSDRTDSDIPEIPPSSDRTPPEILKKALSGLSSRWKNWWIRGILTLTMIS |
| <b>Notes</b>                       | This product is produced by and distributed for Abnova, a company based in Taiwan.  |
| <b>Product Application Details</b> |   |
| <b>Applications</b>                | Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Knockdown Validated   |
| <b>Recommended Dilutions</b>       | Western Blot 1:500, ELISA, Immunocytochemistry/ Immunofluorescence 1:10-1:500, Knockdown Validated  |
| <b>Application Notes</b>           | Antibody reactivity against Recombinant Protein with GST tag on ELISA and WB. GST tag alone is used as a negative control.  |

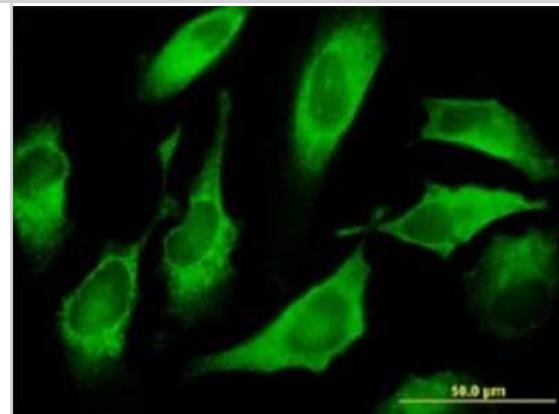


## Images

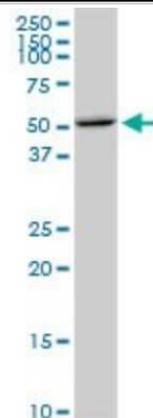
Western Blot: CDS1 Antibody (2D10) [H00001040-M01] - CDS1 immunoreactivity and CDS activity localises to mitochondria in rat brain and liver. [A] Rat brain and [B] liver fractionated and analysed by CDS1 immunoreactivity by Western blot and for CDS activity. CDS activity was monitored in triplicate and error bars denote S.E.M. WCL, whole cell lysate; Micro, microsomes; C.Mito, crude mitochondria; Cyto, cytosol; P.Mito, pure mitochondria, MAMs, mitochondrial associated membranes; CDS, CDP-diacylglycerol synthase. Image collected and cropped by CiteAb from the following publication ([www.linkinghub.elsevier.com/retrieve/pii/S1388198117302421](http://www.linkinghub.elsevier.com/retrieve/pii/S1388198117302421)) licensed under a CC-BY license.



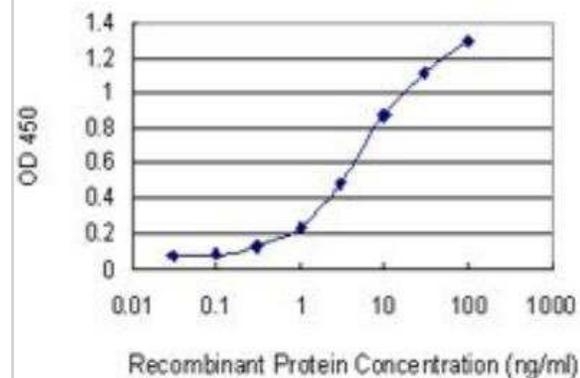
Immunocytochemistry/Immunofluorescence: CDS1 Antibody (2D10) [H00001040-M01] - Analysis of monoclonal antibody to CDS1 on HeLa cell . Antibody concentration 10 ug/ml.



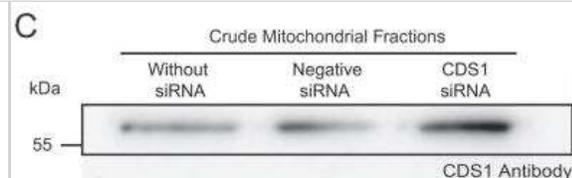
Western Blot: CDS1 Antibody (2D10) [H00001040-M01] - CDS1 monoclonal antibody (M01), clone 2D10. Analysis of CDS1 expression in human liver.



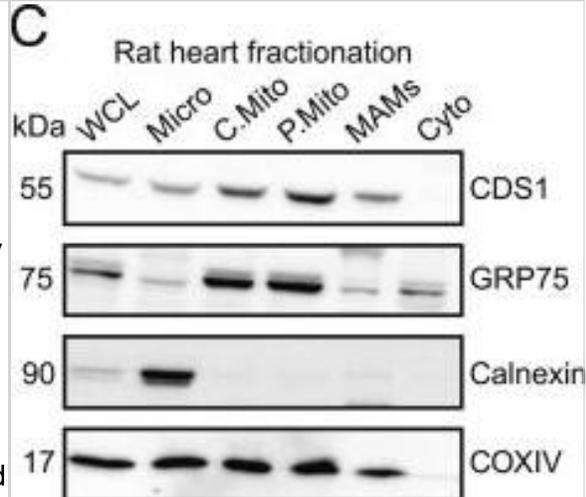
ELISA: CDS1 Antibody (2D10) [H00001040-M01] - Detection limit for recombinant GST tagged CDS1 is 0.1 ng/ml as a capture antibody.



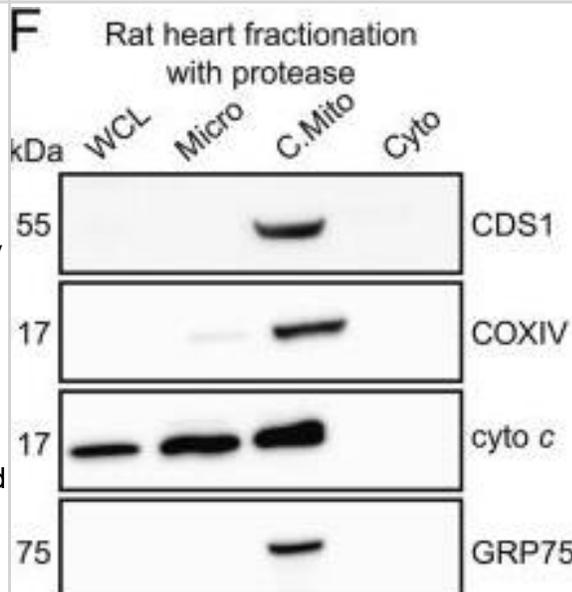
Western Blot: CDS1 Antibody (2D10) [H00001040-M01] - Knockdown of CDS1 with siRNA does not lead to a reduction in the p55 band. Mitochondrial fractions prepared from control, negative siRNA-treated and CDS1 siRNA-treated H9c2 cells were analysed for CDS1 immunoreactivity by Western blot. Image collected and cropped by CiteAb from the following publication ([www.sciencedirect.com/science/article/pii/S1388198117302421?via%3DIihub](http://www.sciencedirect.com/science/article/pii/S1388198117302421?via%3DIihub)) licensed under a CC-BY license.



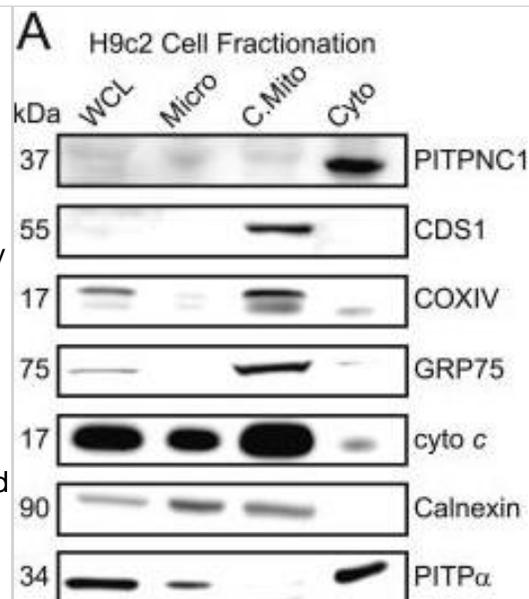
Western Blot: CDS1 Antibody (2D10) [H00001040-M01] - Localisation of CDS1 immunoreactivity & CDS activity to mitochondria. [A, B] Differentiated H9c2 cells fractionated & analysed for [A] CDS1 immunoreactivity by Western blot; [B] CDS activity. [C-E] Rat heart fractionated & analysed for [C] CDS1 immunoreactivity & markers, [D] CDS1 immunoreactivity (entire Western blot shown) & [E] CDS activity. [F-H] Rat heart fractionated in the presence of the protease, subtilisin & analysed for [F] CDS1 immunoreactivity by western blot, [G] CDS activity & [H] PI synthase (PIS) activity. CDS & PIS activity was monitored in triplicate & error bars denote  $\pm$  S.E.M. COXIV, GRP75 & cyto c are markers for mitochondria, PITPNC1 & PITP $\alpha$  are cytosolic markers & calnexin is a marker for the ER. WCL, whole cell lysate; Micro, microsomes; C.Mito, crude mitochondria; Cyto, cytosol; P.Mito, pure mitochondria, MAMs, mitochondrial associated membranes; PIS, PI synthase; CDS, CDP-diacylglycerol synthase. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/29253589>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: CDS1 Antibody (2D10) [H00001040-M01] - Localisation of CDS1 immunoreactivity & CDS activity to mitochondria. [A, B] Differentiated H9c2 cells fractionated & analysed for [A] CDS1 immunoreactivity by Western blot; [B] CDS activity. [C-E] Rat heart fractionated & analysed for [C] CDS1 immunoreactivity & markers, [D] CDS1 immunoreactivity (entire Western blot shown) & [E] CDS activity. [F-H] Rat heart fractionated in the presence of the protease, subtilisin & analysed for [F] CDS1 immunoreactivity by western blot, [G] CDS activity & [H] PI synthase (PIS) activity. CDS & PIS activity was monitored in triplicate & error bars denote  $\pm$  S.E.M. COXIV, GRP75 & cyto c are markers for mitochondria, PITPNC1 & PITP $\alpha$  are cytosolic markers & calnexin is a marker for the ER. WCL, whole cell lysate; Micro, microsomes; C.Mito, crude mitochondria; Cyto, cytosol; P.Mito, pure mitochondria, MAMs, mitochondrial associated membranes; PIS, PI synthase; CDS, CDP-diacylglycerol synthase. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/29253589>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



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## Publications

Blunsom NJ, Gomez-Espinosa E, Ashlin TG, Cockcroft S. Mitochondrial CDP-diacylglycerol synthase activity is due to the peripheral protein, TAMM41 and not due to the integral membrane protein, CDP-diacylglycerol synthase 1. *Biochim. Biophys. Acta* 2017-12-16 [PMID: 29253589] (WB)

Gemmill RM, Roche J, Potiron VA et al. ZEB1-responsive genes in non-small cell lung cancer *Cancer Lett* 2011-01-01 [PMID: 20980099] (WB, Human)



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### Products Related to H00001040-M01

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|                    |   |
|--------------------|---|
| HAF007             | Goat anti-Mouse IgG Secondary Antibody [HRP]            |
| NB720-B            | Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin] |
| NBP1-43319-0.5mg   | Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)           |
| H00001040-Q01-10ug | Recombinant Human CDS1 GST (N-Term) Protein             |

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### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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