

### Anti-GCDH/GCD antibody [3E9BA3BF5] ab112998

2 Images

#### Overview

<b>Product name</b>	Anti-GCDH/GCD antibody [3E9BA3BF5]
<b>Description</b>	Mouse monoclonal [3E9BA3BF5] to GCDH/GCD
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	Fibroblast, HeLa, HepG2, and Rat Cardiomyocyte cells.
<b>General notes</b>	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a>.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p> <p>Product was previously marketed under the MitoSciences sub-brand.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C long term.
<b>Storage buffer</b>	<p>pH: 7.5</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituent: 99.98% HEPES buffered saline</p>
<b>Purity</b>	Proprietary Purification
<b>Purification notes</b>	ab112998 was produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation. Monoclonal purity was near homogeneity as judged by SDS-PAGE (>95%).
<b>Clonality</b>	Monoclonal

Clone number	3E9BA3BF5
Isotype	IgG1
Light chain type	kappa

## Applications

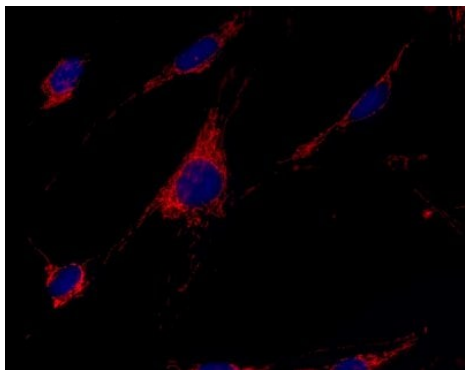
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab112998 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF		Use a concentration of 1 µg/ml.
Flow Cyt		Use a concentration of 1 µg/ml. 0.1% Triton X-100 permeabilization recommended. <b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

## Target

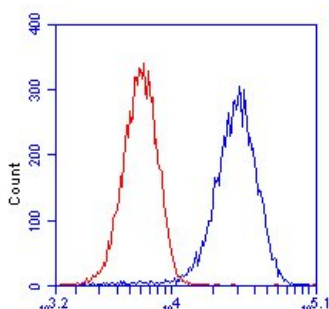
<b>Function</b>	Catalyzes the oxidative decarboxylation of glutaryl-CoA to crotonyl-CoA and CO(2) in the degradative pathway of L-lysine, L-hydroxylysine, and L-tryptophan metabolism. It uses electron transfer flavoprotein as its electron acceptor. Isoform Short is inactive.
<b>Tissue specificity</b>	Isoform 1 and isoform 2 are expressed in fibroblasts and liver.
<b>Pathway</b>	Amino-acid metabolism; lysine degradation. Amino-acid metabolism; tryptophan metabolism.
<b>Involvement in disease</b>	Defects in GCDH are the cause of glutaric aciduria type 1 (GA1) [MIM:231670]. GA1 is an autosomal recessive metabolic disorder characterized by progressive dystonia and athetosis due to gliosis and neuronal loss in the basal ganglia.
<b>Sequence similarities</b>	Belongs to the acyl-CoA dehydrogenase family.
<b>Cellular localization</b>	Mitochondrion matrix.

## Images



Immunocytochemistry/ Immunofluorescence - Anti-GCDH/GCD antibody [3E9BA3BF5] (ab112998)

ab112998 at 1 µg/ml staining GCDH/GCD in fibroblast cells by immunocytochemistry (4% paraformaldehyde fixed and 0.1% Triton X-100 permeabilized) followed by Alexa Fluor® 594 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1 hour (red). Nuclei were stained with DAPI.



Flow Cytometry - Anti-GCDH/GCD antibody [3E9BA3BF5] (ab112998)

ab112998 at 1ug/ml staining GCDH/GCD in HeLa cells by Flow Cytometry (blue). Isotype control antibody (red).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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