


# Anti-GDAP1 antibody ab100905

[2 References](#) [2 Images](#)

### Overview

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<b>Product name</b>	Anti-GDAP1 antibody
<b>Description</b>	Rabbit polyclonal to GDAP1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human <b>Predicted to work with:</b> Cow, Dog, Orangutan 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	This antibody gave a positive signal in the following tissue lysates: Human brain; Mouse brain; Mouse spinal cord; Rat brain; Rat spinal cord.
<b>General notes</b>	<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>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS  Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab100905 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 10 µg/ml.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 41 kDa (predicted molecular weight: 41 kDa).

## Target

### Function

May function in a signal transduction pathway responsible for ganglioside-induced neurite differentiation. May also have a role in protecting myelin membranes against free radical-mediated damage.

### Tissue specificity

Highly expressed in whole brain and spinal cord. Predominant expression in central tissues of the nervous system not only in neurons but also in Schwann cells.

### Involvement in disease

Defects in GDAP1 are the cause of Charcot-Marie-Tooth disease type 4A (CMT4A) [MIM:214400]. CMT4A is a form of Charcot-Marie-Tooth disease, the most common inherited disorder of the peripheral nervous system. Charcot-Marie-Tooth disease is classified in two main groups on the basis of electrophysiologic properties and histopathology: primary peripheral demyelinating neuropathy or CMT1, and primary peripheral axonal neuropathy or CMT2. Demyelinating CMT neuropathies are characterized by severely reduced nerve conduction velocities (less than 38 m/sec), segmental demyelination and remyelination with onion bulb formations on nerve biopsy, slowly progressive distal muscle atrophy and weakness, absent deep tendon reflexes, and hollow feet. Autosomal recessive forms of demyelinating Charcot-Marie-Tooth disease are by convention designated CMT4. CMT4A is a severe form characterized by early age of onset and rapid progression leading to inability to walk in late childhood or adolescence.

Defects in GDAP1 are the cause of Charcot-Marie-Tooth disease axonal recessive with vocal cord paresis (CMT2RV) [MIM:607706]. CMT2RV is a form of Charcot-Marie-Tooth disease characterized by the association of axonal neuropathy with vocal cord paresis.

Defects in GDAP1 are the cause of Charcot-Marie-Tooth disease type 2K (CMT2K) [MIM:607831]. CMT2K is an axonal form of Charcot-Marie-Tooth disease. Axonal CMT neuropathies are characterized by signs of axonal regeneration in the absence of obvious myelin alterations, normal or slightly reduced nerve conduction velocities, and progressive distal muscle weakness and atrophy. CMT2K onset is in early childhood (younger than 3 years). This phenotype is characterized by foot deformities, kyphoscoliosis, distal limb muscle weakness and atrophy, areflexia, and diminished sensation in the lower limbs. Weakness in the upper limbs is observed in the first decade, with clawing of the fingers. Inheritance can be autosomal dominant or recessive.

Defects in GDAP1 are the cause of Charcot-Marie-Tooth disease recessive intermediate type A (CMTRIA) [MIM:608340]. CMTRIA is a form of Charcot-Marie-Tooth disease characterized by clinical and pathologic features intermediate between demyelinating and axonal peripheral neuropathies, and motor median nerve conduction velocities ranging from 25 to 45 m/sec.

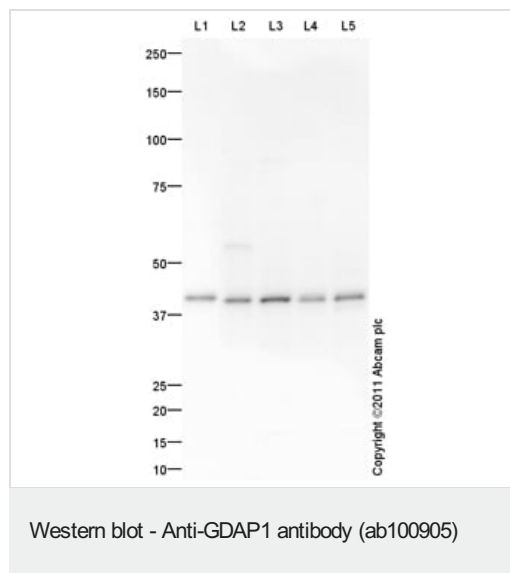
## Sequence similarities

Belongs to the GST superfamily.  
Contains 1 GST C-terminal domain.  
Contains 1 GST N-terminal domain.

## Cellular localization

Cytoplasm.

## Images



**All lanes :** Anti-GDAP1 antibody (ab100905) at 1 µg/ml

**Lane 1 :** Human brain tissue lysate - total protein ([ab29466](#))

**Lane 2 :** Brain (Mouse) Tissue Lysate

**Lane 3 :** Spinal Cord (Mouse) Tissue Lysate

**Lane 4 :** Brain (Rat) Tissue Lysate

**Lane 5 :** Spinal Cord (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

Developed using the ECL technique.

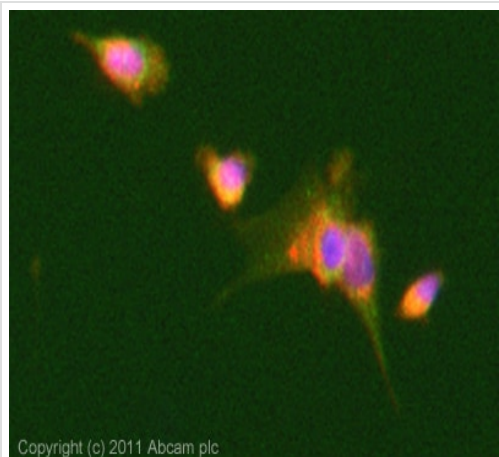
Performed under reducing conditions.

**Predicted band size:** 41 kDa

**Observed band size:** 41 kDa

**Additional bands at:** 55 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 30 seconds



Immunocytochemistry/ Immunofluorescence - Anti-GDAP1 antibody (ab100905)

ICC/IF image of ab100905 stained SKNSH cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab100905, 10µg/ml) overnight at +4°C. The secondary antibody (green) was **ab96899**, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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

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