

# Anti-HCN1 antibody - C-terminal ab229340

[3 References](#) [8 Images](#)

### Overview

<b>Product name</b>	Anti-HCN1 antibody - C-terminal
<b>Description</b>	Rabbit polyclonal to HCN1 - C-terminal
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-Fr, ICC/IF, IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant fragment within Human HCN1 (C terminal). The exact sequence is proprietary. Database link: <a href="#">O60741</a>
<b>Positive control</b>	WB: Mouse and rat brain tissue extracts; SK-N-AS whole cell extract. IHC-P: Mouse retina and brain tissues; rat brain tissue. ICC/IF: Rat DIV9 E18 primary cortical neurons. IHC-Fr: Frozen mouse cerebellum and hippocampus tissues.
<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

<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 long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab229340 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
IHC-Fr		1/100 - 1/1000.
ICC/IF		1/100 - 1/1000.
IHC-P		1/100 - 1/1000.
WB		1/500 - 1/3000. Predicted molecular weight: 99 kDa.

## Target

### Function

Hyperpolarization-activated ion channel exhibiting weak selectivity for potassium over sodium ions. Contributes to the native pacemaker currents in heart (If) and in neurons (Ih). Activated by cAMP, and at 10-100 times higher concentrations, also by cGMP. May mediate responses to sour stimuli.

### Tissue specificity

Detected in brain, in particular in amygdala and hippocampus, while expression in caudate nucleus, corpus callosum, substantia nigra, subthalamic nucleus and thalamus is very low or not detectable. Detected at very low levels in muscle and pancreas.

### Sequence similarities

Belongs to the potassium channel HCN family.  
Contains 1 cyclic nucleotide-binding domain.

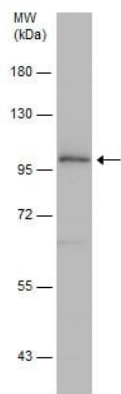
### Domain

The segment S4 is probably the voltage-sensor and is characterized by a series of positively charged amino acids at every third position.

### Cellular localization

Membrane.

## Images

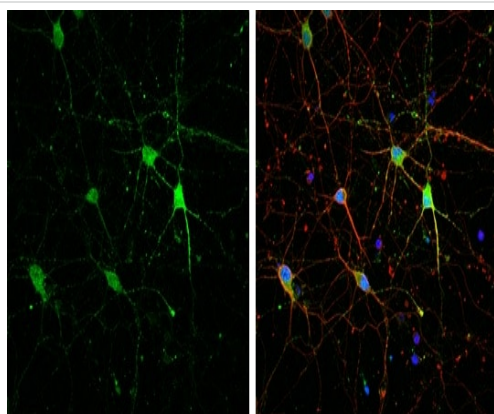


Western blot - Anti-HCN1 antibody - C-terminal (ab229340)

Anti-HCN1 antibody - C-terminal (ab229340) at 1/1000 dilution + SK-N-AS (human neuroblastoma cell line) whole cell extract at 30  $\mu$ g

**Predicted band size:** 99 kDa

7.5% SDS-PAGE gel.

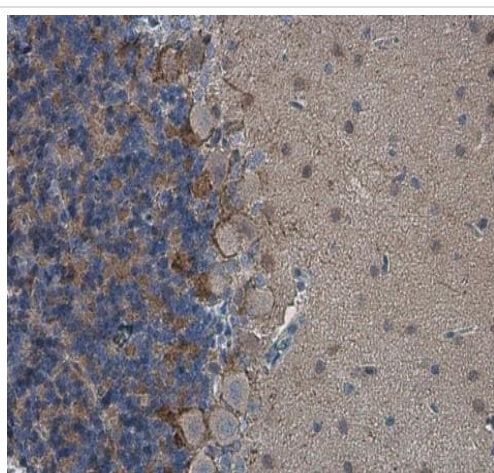


Immunocytochemistry/ Immunofluorescence - Anti-HCN1 antibody - C-terminal (ab229340)

4% paraformaldehyde-fixed DIV9 rat E18 primary cortical neurons cells stained for HCN1 (green) using ab229340 at 1/500 dilution in ICC/IF.

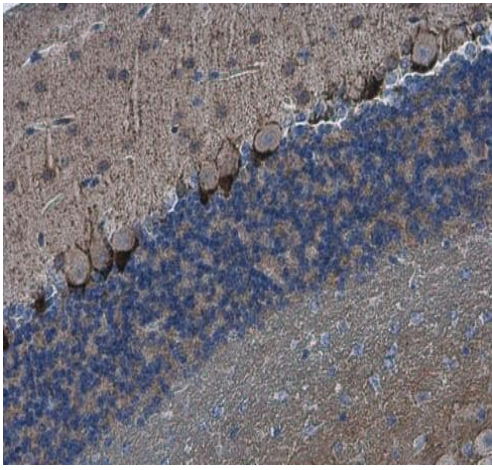
Beta Tubulin 3/ Tuj1 (red).

Nuclear counterstain: Fluoroshield with DAPI (blue).



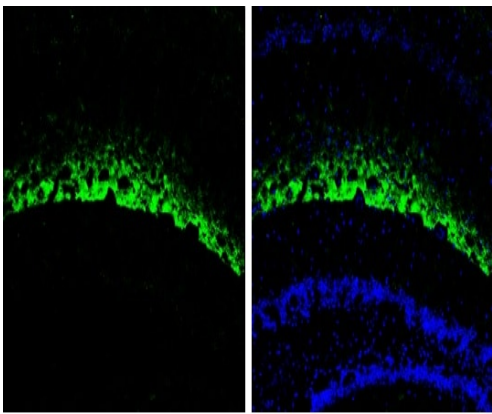
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HCN1 antibody - C-terminal (ab229340)

Paraffin-embedded rat brain tissue stained for HCN1 using ab229340 at 1/500 dilution in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HCN1 antibody - C-terminal (ab229340)

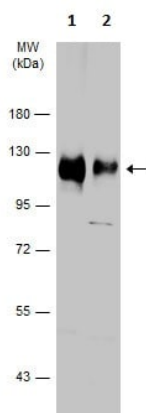
Paraffin-embedded mouse brain tissue stained for HCN1 using ab229340 at 1/500 dilution in immunohistochemical analysis.



Immunohistochemistry (Frozen sections) - Anti-HCN1 antibody - C-terminal (ab229340)

Frozen-sectioned adult mouse hippocampus tissue stained for HCN1 (green) using ab229340 at 1/250 dilution in immunohistochemical analysis.

Nuclear counterstain: Fluoroshield with DAPI (blue)



Western blot - Anti-HCN1 antibody - C-terminal (ab229340)

**All lanes** : Anti-HCN1 antibody - C-terminal (ab229340) at 1/1000 dilution

**Lane 1** : Mouse brain tissue extract

**Lane 2** : Rat brain tissue extract

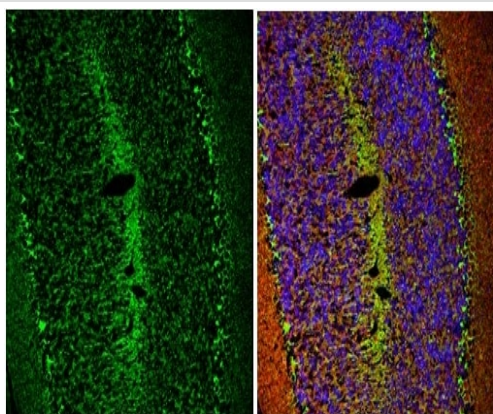
Lysates/proteins at 50 µg per lane.

**Secondary**

**All lanes** : HRP-conjugated anti-rabbit IgG antibody

**Predicted band size:** 99 kDa

7.5% SDS-PAGE gel.

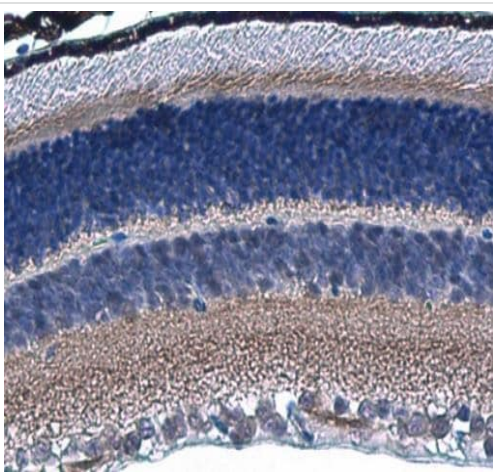


Immunohistochemistry (Frozen sections) - Anti-HCN1 antibody - C-terminal (ab229340)

Frozen-sectioned adult mouse cerebellum tissue stained for HCN1 (green) using ab229340 at 1/250 dilution in immunohistochemical analysis.

beta Tubulin 3/ TUJ1 (red).

Nuclear counterstain: Fluoroshield with DAPI (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-HCN1 antibody - C-terminal (ab229340)

Paraffin-embedded mouse retina tissue stained for HCN1 using ab229340 at 1/800 dilution in immunohistochemical analysis.

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

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