

Product datasheet

Anti-CGRP antibody [4901] ab81887

★★★★★ 7 Abreviews 31 References 3 Images

Overview

Product name	Anti-CGRP antibody [4901]
Description	Mouse monoclonal [4901] to CGRP
Host species	Mouse
Specificity	ab81887 is specific for Calcitonin Gene Related Peptide. It also recognizes rat beta CGRP and human alpha CGRP (10 fold less sensitivity compared to rat alpha CGRP).
Tested applications	Suitable for: Neutralising, ICC/IF, Flow Cyt, IHC-Fr Unsuitable for: WB
Species reactivity	Reacts with: Mouse, Rat, Guinea pig, Human Predicted to work with: Mammals
Immunogen	Rat alpha-CGRP
Positive control	Dorsal root ganglia, pancreas and gut.
General notes	

This antibody is an excellent tool for immunohistochemistry and for multiple labeling immunofluorescence of peripheral tissue like stomach, intestine, pancreas, sensory ganglia, and all the regions of the body that are innervated by primary afferent neurons as well as central nervous tissue.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.50 Constituents: 0.01% BSA, 50% Glycerol, 0.87% Sodium chloride, 0.238% HEPES
Purity	Protein G purified
Primary antibody notes	This antibody is an excellent tool for immunohistochemistry and for multiple labeling immunofluorescence of peripheral tissue like stomach, intestine, pancreas, sensory ganglia, and all the regions of the body that are innervated by primary afferent neurons as well as central nervous tissue.
Clonality	Monoclonal
Clone number	4901
Isotype	IgG2a

Applications

Our [Abpromise guarantee](#) covers the use of **ab81887** 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
Neutralising		Use at an assay dependent concentration.
ICC/IF	★★★★☆	1/50 - 1/100.
Flow Cyt		Use at an assay dependent concentration. PubMed: 24430801 ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.
IHC-Fr	★★★★★	1/1000.

Application notes Is unsuitable for WB.

Target

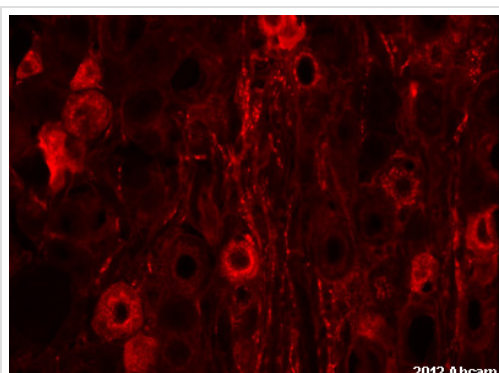
Relevance

CGRP is present in C-cells of the thyroid and in central and peripheral nerves. CGRP has several important physiologic roles: it is a potent vasodilator, and can affect the force and rate of heart beat; it can modulate acetylcholine receptor function at the neuromuscular junction; it has been demonstrated to block tolerance to morphine; and it can modulate antigen presentation in Langerhans cells in the skin. Despite these important physiologic functions, therapeutic strategies using CGRP have been impeded due to the lack of a cloned CGRP receptor with which ligands could be developed.

Cellular localization

Endoplasmic reticulum and Secreted

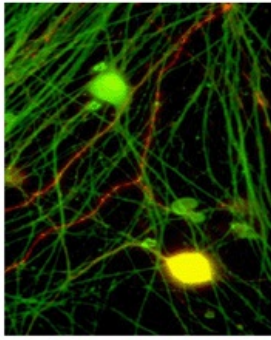
Images



ab81887 staining rat DRG sections by IHC-Fr. The sections were fixed with 4% paraformaldehyde, permeabilised in 0.3% PBS-Tween and blocked for non-specific protein-protein interactions with 10% donkey's serum for 1h at 24°C. Staining with ab81887 at a 1/1000 dilution in PBS-Triton (0.3%) with 10% donkey's serum and 0.02% azide was performed for 24h at 4°C. A donkey anti-mouse Alexa568 polyclonal antibody at 1/1000 was used as the secondary antibody.

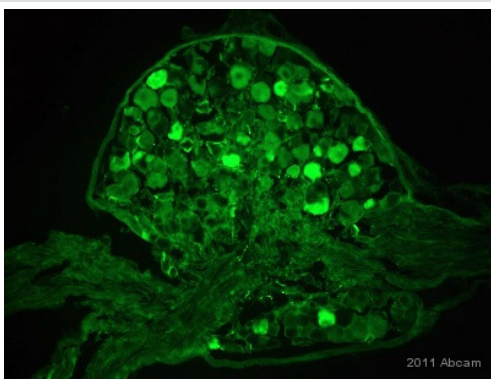
Immunohistochemistry (Frozen sections) - Anti-CGRP antibody [4901] (ab81887)

This image is courtesy of an Abreview submitted by Ruma Raha-Chowdhury



Immunocytochemistry/ Immunofluorescence - Anti-CGRP antibody [4901] (ab81887)

Immunofluorescent staining of CGRP (red) in cryopreserved DRG neurons grown on coverslips using ab81887 at 1/50 dilution. Green staining is PGP9.5. Yellow staining is the colocalization of CGRP and PGP9.5.



Immunohistochemistry (Frozen sections) - Anti-CGRP antibody [4901] (ab81887)

This image is courtesy of an abreview submitted by Dr. Iwasaki

ab81887 staining CGRP in Mouse dorsal root ganglion tissue sections by Immunohistochemistry (IHC-Fr - frozen sections). Tissue was fixed with paraformaldehyde and blocked with 2% BSA and 2% goat serum for 30 minutes at room temperature. Samples were incubated with primary antibody (1/300 in blocking solution) for 12 hours at 4°C. An undiluted Alexa Fluor[®]488-conjugated Goat anti-mouse IgG polyclonal (2 mg/ml) was used as the secondary antibody.

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