

Datasheet for 200-301-D15**Calcitonin Gene Related Peptide (CGRP) Antibody****Overview**

Description:	Anti-Calcitonin Gene Related Peptide (CGRP) (MOUSE) Antibody - 200-301-D15
Item No.:	200-301-D15
Size:	100 µL
Applications:	ELISA, Multiplex, IF, IHC
Reactivity:	Human, Rat
Host Species:	Mouse

Product Details

Background:	CGRP antibody recognizes Calcitonin Gene Related Peptide or CGRP which is a 37 amino acid peptide and is the most potent endogenous vasodilator currently known. CGRP is primarily produced in nervous tissue, however, its receptors are expressed throughout the body. CGRP is also strongly implicated in the vasodilatory effect of endogenous cannabinoid anandamide in the brain. This effect was found to be antagonized by capsazepine. CGRP is also currently a major target of research in regards to factors effecting the onset of migraine headaches. CGRP antibodies have been used successfully in immunoneutralization. Anti-CGRP antibody is ideal for investigators involved in Cell Signaling, Neuroscience, Signal Transduction research.
Synonyms:	Alpha-type CGRP, Calcitonin gene-related peptide I, Calcitonin gene-related peptide 1, CGRP-I, Calca, Calc
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	4901
Format:	IgG2a

Target Details

Gene Name:	Calca
Reactivity:	Human, Rat
Immunogen Type:	Recombinant Protein

Immunogen:	Anti-CGRP Monoclonal Antibody was produced by repeated immunizations with purified rat alpha-CGRP.
Purity/Specificity:	Anti-CGRP Monoclonal Antibody is directed against rat CGRP protein. The antibody was purified from concentrated tissue culture supernate by Protein G chromatography. This antibody is specific for human and rat CGRP protein. A BLAST analysis was used to suggest cross-reactivity with CGRP from most mammalian sources based on very high homology with the immunizing sequence. Calcitonin Gene Related Peptide antibody also recognizes rat beta-CGRP and human alpha-CGRP (10-fold less sensitivity compared to rat alpha-CGRP).
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - P01256• GeneID - 24241• NCBI - NP_001029128.1

Application Details

Tested Applications:	ELISA, Multiplex
Suggested Applications:	IF, IHC (Based on references)
Application Note:	Anti-Calcitonin Gene Related Peptide antibody has been tested by ELISA and ICC. This product is not recommended for use in Western Blotting. Specific conditions for reactivity should be optimized by the end user. Suggested positive controls are dorsal root ganglia, pancreas and gut.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5,000
IF:	User Optimized
IHC:	1:50-1:100
IP:	1:50-1:100
WB:	not recommended

Formulation

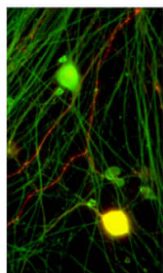
Physical State:	Liquid
Concentration:	Titred value sufficient to run approximately 10 mini blots. by UV absorbance at 280 nm
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images

Anti-Calcitonin Gene Related Peptide (CGRP)



Immunostaining of CGRP (red) in cryopreserved DRG neurons grown on coverslips. 40xmag. Green staining is PGP9.5. Yellow staining is the colocalization of CGRP and PGP9.5. Cells were obtained and photo was provided courtesy of QBM Cell Science.

Immunocytochemistry

Immunocytochemistry of Anti-Calcitonin Gene Related Peptide (CGRP) (Mouse) Antibody. Tissue: cryopreserved DRG neurons. Fixation: grown on coverslips. Antigen retrieval: not required. Primary antibody: Calcitonin Gene Related Peptide antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: Calcitonin Gene Related Peptide is nuclear and occasionally cytoplasmic. Staining: CGRP (red). Green staining is PGP9.5. Yellow staining is the colocalization of CGRP and PGP9.5.

References

- Webber JL et al. Axodendritic versus axosomatic cochlear efferent termination is determined by afferent type in a hierarchical logic of circuit formation. *Sci Adv.* (2021)
- Morelli C et al. Identification of a population of peripheral sensory neurons that regulates blood pressure. *Cell Rep.* (2021)
- Dhandapani et al. Control of mechanical pain hypersensitivity in mice through ligand-targeted photoablation of TrkB-positive sensory neurons. *Nature Communications* (2018)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.