

# Parvalbumin Polyclonal Antibody

Product Details	
Size	100 µg
Species	Human, Rat
Published Species	Rat, Sea urchin, Zebrafish, Mouse, Human
Expression System	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Purified parvalbumin from rat skeletal muscle.
Form	Lyophilized
Purification	Antigen affinity chromatography
Storage buffer	0.1M sodium phosphate, pH 7.0, with 20mg/mL BSA
Contains	0.1% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_2173898

Applications	Tested Dilution	Publications
ELISA (ELISA)	Assay dependent	-
Immunocytochemistry (ICC)	1:100-1:200	3 Publications
Immunofluorescence (IF)	1:100-1:200	4 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1 µg/mL	2 Publications
Immunoprecipitation (IP)	5 µg/mL	-
Western Blot (WB)	0.1 µg/mL	4 Publications
Immunohistochemistry (IHC)	-	12 Publications
Immunohistochemistry - Free Floating (IHC (Free))	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

## Product Specific Information

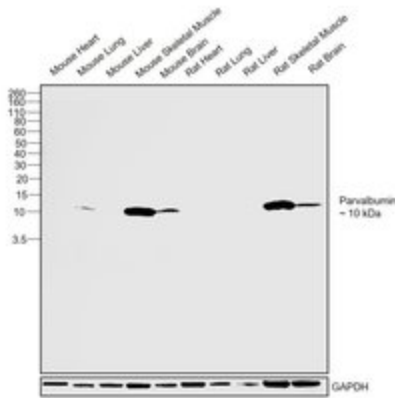
PA1-933 detects parvalbumin protein in human and rat samples.

PA1-933 has successfully been used in Western blot, ELISA, immunoprecipitation and immunohistochemical procedures. By Western blot, this antibody detects a 12 kDa protein representing parvalbumin from rat cerebellum.

Parvalbumin protein is relatively small and, therefore, it is recommended that the electrophoresis be performed using tricine-SDS-PAGE gels and transferred to a nylon membrane.

The PA1-933 immunizing protein corresponds to purified parvalbumin from rat skeletal muscle.

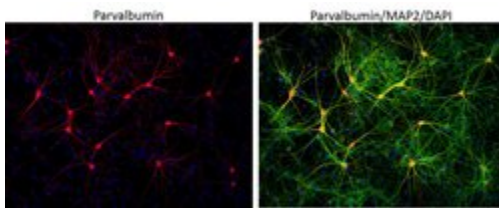
## Advanced Verification Data



### Parvalbumin Antibody (PA1-933)

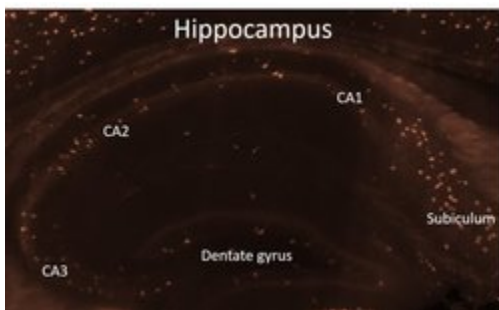
Antibody specificity was demonstrated by detection of differential basal expression of the target across tissues owing to their inherent genetic constitution. Relative expression of Parvalbumin was observed in Mouse Skeletal Muscle, Mouse Brain, Rat Skeletal Muscle and Rat Brain in comparison to Mouse Heart, Mouse Lung, Mouse Liver, Rat Heart, Rat Lung and Rat Liver using Anti-Parvalbumin Polyclonal Antibody (Product # PA1-933) in Western Blot. Relative expression validation info.

## Product Images For Parvalbumin Polyclonal Antibody



### Parvalbumin Antibody (PA1-933) in IF

Immunofluorescent analysis of MAP2 (green) and parvalbumin (red) on rat primary Hippocampal neurons (E18) (Product # A15587) cultured for 28 days in the B-27 Plus Neuronal Culture System (Product # A3653401). At day 28 the cells were fixed with 4% paraformaldehyde for 15 min, permeabilized with 0.1% triton x-100 for 30min, and blocked with 1% BSA for 30 min at room temperature. Cells were stained with anti-parvalbumin antibody (Product # PA1-933) at a dilution of 1:200, and anti-MAP2 (Product # 13-1500) at a dilution of 1:4000, in 1% BSA staining buffer, overnight at 4C, and then incubated with Alexa Fluor 488 conjugated donkey anti-rabbit (Product # A-21206) and Alexa Fluor 594 donkey anti-mouse (Product # A-21203) antibodies at a dilution of 1:1000 for 30 min. at room temp. Wash 3 times with DPBS. Stain with DAPI for nucleus.



### Parvalbumin Antibody (PA1-933) in IF

Spatial expression of Parvalbumin in intact mouse brain hemispheres. Tissue was perfused with LifeCanvas's SHIELD (Park et al., Nature Biotech, 2018) solution kit. Before antibody labeling, lipids were removed for best antibody diffusion. 20 µg anti-Parvalbumin (PV) polyclonal antibody (Product # PA1-933) was then used to actively label the intact tissue sample for < 2 days. A Rhodamine Red-X conjugated Fab fragment secondary antibody was also used in SmartLabel. After antibody labeling, tissue was then refractive index matched using EasyIndex and imaged at single-cell resolution (1.8 µm/pixel in XY with 4-µm Z-step; 561 nm laser line) on LifeCanvas's SmartSPIM light-sheet microscope. Data courtesy of LifeCanvas Technologies.

View more figures on [thermofisher.com](https://thermofisher.com)

## 27 References

### Immunofluorescence (4)

Frontiers in genetics

## Dysbindin Deficiency Modifies the Expression of GABA Neuron and Ion Permeation Transcripts in the Developing Hippocampus.

"PA1933 was used in immunohistochemistry to define the transcriptome of the developing mouse hippocampus in order to identify mechanisms downstream dysbindin defects"

Authors: Larimore J,Zlatic SA,Arnold M,Singleton KS,Cross R,Rudolph H,Bruegge MV,Sweetman A,Garza C,Whisnant E,Faundez V

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2020

PloS one

## Calbindin-D32k is localized to a subpopulation of neurons in the nervous system of the sea cucumber *Holothuria glaberrima* (Echinodermata).

"Published figure using Parvalbumin polyclonal antibody (Product # PA1-933) in Immunofluorescence"

Authors: Díaz-Balzac CA,Lázaro-Peña MI,García-Rivera EM,González CI,García-Arrarás JE

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2012

[View more IF references on thermofisher.com](#)

## Immunohistochemistry (12)

Frontiers in genetics

## Dysbindin Deficiency Modifies the Expression of GABA Neuron and Ion Permeation Transcripts in the Developing Hippocampus.

"PA1933 was used in immunohistochemistry to define the transcriptome of the developing mouse hippocampus in order to identify mechanisms downstream dysbindin defects"

Authors: Larimore J,Zlatic SA,Arnold M,Singleton KS,Cross R,Rudolph H,Bruegge MV,Sweetman A,Garza C,Whisnant E,Faundez V

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2020

Biology open

## The role of retrograde intraflagellar transport genes in aminoglycoside-induced hair cell death.

"PA1-933 was used in Immunohistochemistry to study the roles of retrograde intraflagellar transport motor and adaptor complex genes in aminoglycoside toxicity."

Authors: Stawicki TM,Linbo T,Hernandez L,Parkinson L,Bellefeuille D,Rubel EW,Raible DW

**Species**  
Zebrafish

**Dilution**  
1:1,000

**Year**  
2019

[View more IHC references on thermofisher.com](#)

## More applications with references on thermofisher.com

ICC (3) IHC (P) (2) Misc (1) IHC (Free) (1) WB (4)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.