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Product Datasheet

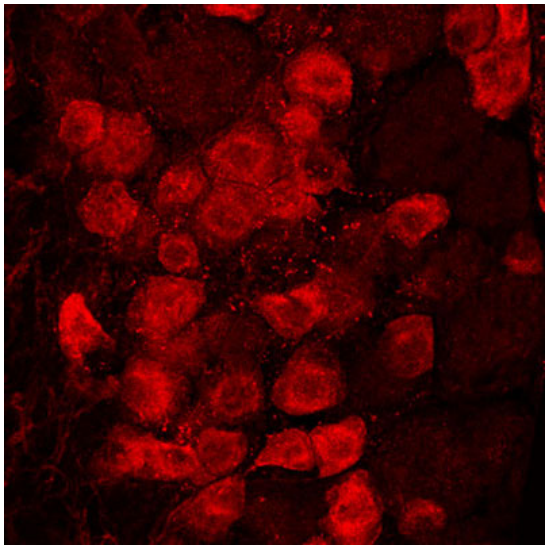
Chickens make *better* antibodies.

Anti-Prostatic Acid Phosphatase (PAP) Antibody

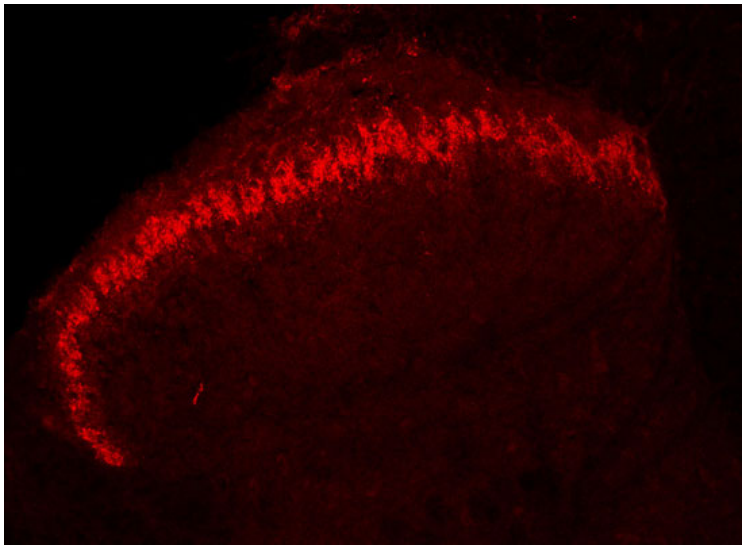
Overview

Catalog #	PAP
Concentration	10 mg/mL
Host Species	Chicken Polyclonal
Format	Mixture of IgY fraction and affinity-purified antibodies
Buffer	Sodium phosphate (10 mM, pH 7.2) buffered isotonic saline (0.9%, w/v), glycerol (50%, v/v), with sodium azide (0.02%,w/v) as an anti-microbial agent.
Applications	IHC 1:500-1:1000 WB 1:1000-1:2000
Species Reactivity	Human, Mouse, and Rat
Immunogen	Recombinant mouse PAP expressed in *Escherichia coli*
Molecular Weight	45 kDa
Cite this Antibody	Aves Labs Cat# PAP, RRID: AB_2313557

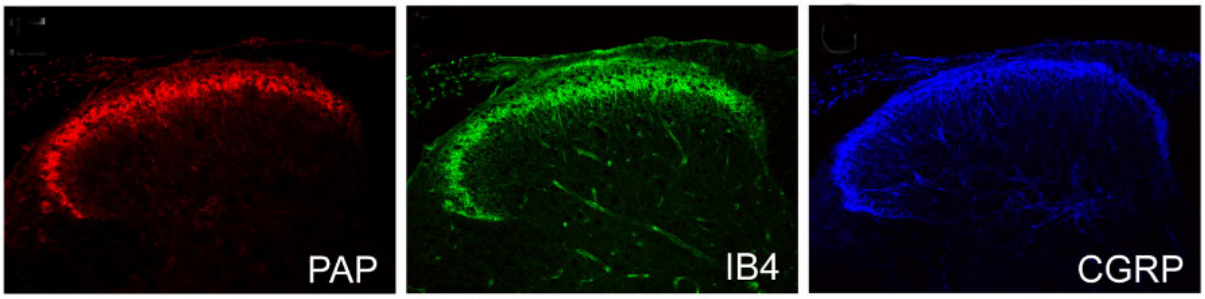
Images



Adult mouse DRG was fixed in 4% paraformaldehyde, cryostat-sectioned, and then stained for PAP immunoreactivity (1:500 dilution), showing immunoreactive material in primary sensory neurons. Photomicrograph by Dr. Mark Zilka, Univ. of North Carolina.



Adult mouse spinal cord was fixed in 4% paraformaldehyde, paraffin-embedded and sectioned, and then sections were stained for PAP immunoreactivity (1:500 dilution). Immunoreactivity shown in Rexed Lamina 2 of the dorsal horn gray matter of the spinal cord. Photomicrograph by Dr. Mark Zilka, University of North Carolina.



Adult mouse spinal cord was fixed in 4% paraformaldehyde, paraffin-embedded and sectioned, and then sections were stained for PAP immunoreactivity (1:500 dilution). Adjacent sections were co-stained for IB4 and Calcitonin Gene-Related Protein (CGRP) (other sensory neuronal markers). Photomicrograph by Dr. Mark Zilka, University of North Carolina.

Details

Target Description

Mouse Prostatic Acid Phosphatase (PAP) is a 43,698 dalton protein (381 amino acids; NCBI accession number AAF23171) associated with prostatic cancer cells, as well as primary afferent sensory neurons involved in the pain pathway. This protein is an enzyme that dephosphorylates adenosine monophosphate (AMP) in the dorsal horn gray matter of the spinal cord, generating free adenosine. Injections of PAP into the dorsal horn of experimental mice has been shown to decrease pain perception by acting in an antinociceptive, antihyperalgesic, and antiallodynic fashion.

Purification Method

Chickens were immunized with recombinant mouse Prostatic Acid Phosphatase protein emulsified in Freund's adjuvants. After multiple injections, eggs were collected from the hens, IgY fractions were prepared from the yolks, and then affinity-purified antibodies were prepared using the PAP protein conjugated to an agarose matrix. The final product is a mixture of both affinity-purified antibodies (25 µg/mL) and purified IgY (10 mg/mL), mixed with glycerol 1:1 (v/v) (to prevent freezing at -20°C), augmented with sodium azide and then filter-sterilized.

Quality Control Tests

Antibodies were analyzed using immunohistochemistry with tissue sections through a 10%-formalin fixed adult mouse. Sections were examined for PAPpositive dorsal root ganglion sensory neurons. Secondary antibodies (fluorescein-labeled goat anti-chicken IgY, Aves Cat. #F-1004) were used at a concentration of 1:500.

Storage

Store at -20°C in the dark. Under these conditions, the antibodies should have a shelf life of at least twelve months, provided they remain sterile.

Our Guarantee

As an original manufacturer, we are dedicated to creating quality and reproducible antibodies that further your research. We provide personalized customer support from the scientists that made the antibody and offer a free replacement or 100% refund if we cannot resolve an issue. Order today and experience how chickens make better antibodies.