

Product datasheet

Anti-Gelsolin antibody ab74420

★★★★★ 3 Abreviews 9 References 3 Images

Overview

<b>Product name</b>	Anti-Gelsolin antibody
<b>Description</b>	Rabbit polyclonal to Gelsolin
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human Gelsolin aa 750 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary. (Peptide available as <a href="#">ab74419</a> )
<b>Positive control</b>	Recombinant Human Gelsolin plasma protein ( <a href="#">ab114279</a> ) can be used as a positive control in WB. This antibody gave a positive signal in the following tissue lysates: Rat Kidney, Mouse Spleen, Rat Thymus

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 or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab74420** 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
ICC/IF		Use a concentration of 1 µg/ml.

Application	Abreviews	Notes
IHC-P	★★★★☆	Use at an assay dependent concentration.
WB	★★★★☆	Use a concentration of 1 µg/ml. Detects a band of approximately 86 kDa (predicted molecular weight: 86 kDa). Can be blocked with <a href="#">Human Gelsolin peptide (ab74419)</a> .

## Target

<b>Function</b>	Calcium-regulated, actin-modulating protein that binds to the plus (or barbed) ends of actin monomers or filaments, preventing monomer exchange (end-blocking or capping). It can promote the assembly of monomers into filaments (nucleation) as well as sever filaments already formed. Plays a role in ciliogenesis.
<b>Tissue specificity</b>	Phagocytic cells, platelets, fibroblasts, nonmuscle cells, smooth and skeletal muscle cells.
<b>Involvement in disease</b>	Defects in GSN are the cause of amyloidosis type 5 (AMYL5) [MIM:105120]; also known as familial amyloidosis Finnish type. AMYL5 is a hereditary generalized amyloidosis due to gelsolin amyloid deposition. It is typically characterized by cranial neuropathy and lattice corneal dystrophy. Most patients have modest involvement of internal organs, but severe systemic disease can develop in some individuals causing peripheral polyneuropathy, amyloid cardiomyopathy, and nephrotic syndrome leading to renal failure.
<b>Sequence similarities</b>	Belongs to the villin/gelsolin family. Contains 6 gelsolin-like repeats.
<b>Post-translational modifications</b>	Phosphorylation on Tyr-86, Tyr-409, Tyr-465, Tyr-603 and Tyr-651 in vitro is induced in presence of phospholipids.
<b>Cellular localization</b>	Cytoplasm > cytoskeleton and Secreted.

## Images



Western blot - Anti-Gelsolin antibody (ab74420)

**All lanes** : Anti-Gelsolin antibody (ab74420) at 1 µg/ml

**Lane 1** : Kidney (Rat) Tissue Lysate

**Lane 2** : Spleen (Mouse) Tissue Lysate

**Lane 3** : Thymus (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes** : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

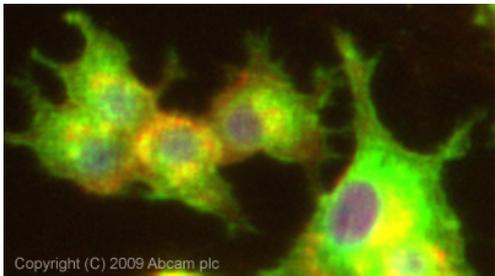
Performed under reducing conditions.

**Predicted band size:** 86 kDa

**Observed band size:** 86 kDa

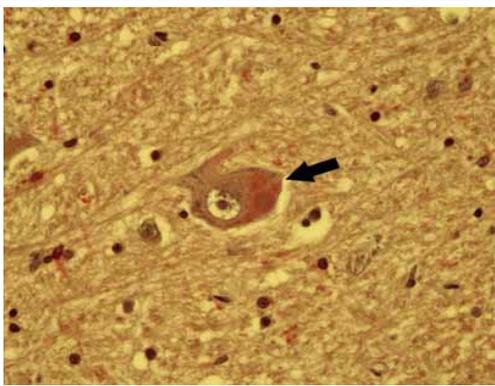
**Additional bands at:** 120 kDa, 140 kDa, 52 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 3 minutes



Immunocytochemistry/ Immunofluorescence - Anti-Gelsolin antibody (ab74420)

ICC/IF image of ab74420 stained PC12 cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab74420, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in 100% methanol fixed (5 min) PC12 cells at 1µg/ml.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Gelsolin antibody (ab74420)

Image from Welander H et al, Biochem Biophys Res Commun. 2011 Aug 19;412(1):32-8. Epub 2011 Jul 21, Fig 1. doi:10.1016/j.bbrc.2011.07.027

ab74420 staining Gelsolin in human brain tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections).

The black arrow indicates a gelsolin-positive Lewy body.

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