

Product datasheet

Anti-Gelsolin antibody ab214342

Recombinant

2 Images

Overview

<b>Product name</b>	Anti-Gelsolin antibody
<b>Description</b>	Alpaca monoclonal to Gelsolin
<b>Host species</b>	Alpaca
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant full length protein corresponding to Human Gelsolin. Database link: <a href="#">P06396</a>
<b>General notes</b>	Contains a FLAG tag (DDDDK) and a His tag Therefore, an anti DDDDK or anti His secondary can be used. We recommend the anti-FLAG option ( <a href="#">ab49763</a> ).  Please note: ab214342 only recognises the Ca <sup>2+</sup> activated form of Human Gelsolin.

Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	Constituents: PBS, 2.9% Sodium chloride
<b>Purity</b>	Purified via His tag
<b>Clonality</b>	Monoclonal

Applications

Our [Abpromise guarantee](#) covers the use of **ab214342** 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
WB		Use at an assay dependent concentration. Detects a band of approximately 86 kDa (predicted molecular weight: 86 kDa).

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.

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**Target**

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**Function**

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.

**Tissue specificity**

Phagocytic cells, platelets, fibroblasts, nonmuscle cells, smooth and skeletal muscle cells.

**Involvement in disease**

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.

**Sequence similarities**

Belongs to the villin/gelsolin family.  
Contains 6 gelsolin-like repeats.

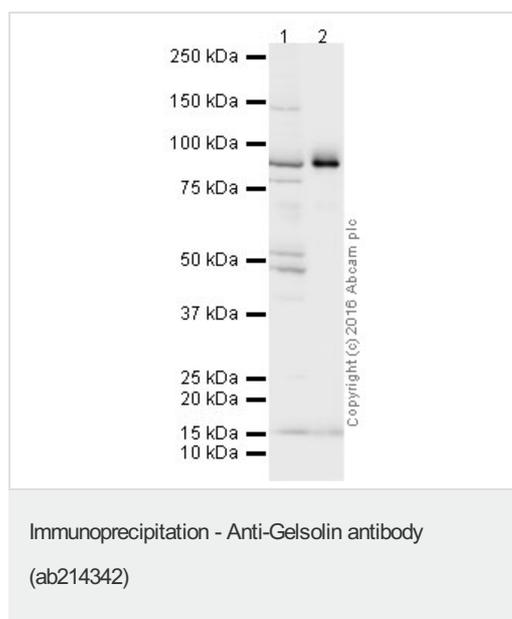
**Post-translational modifications**

Phosphorylation on Tyr-86, Tyr-409, Tyr-465, Tyr-603 and Tyr-651 in vitro is induced in presence of phospholipids.

**Cellular localization**

Cytoplasm > cytoskeleton and Secreted.

## Images



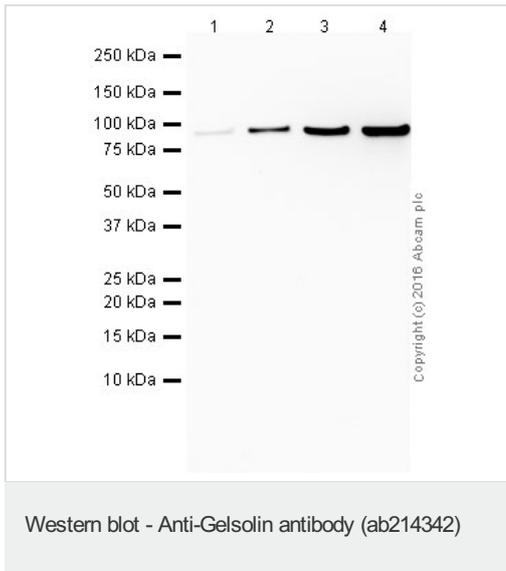
Anti-Gelsolin antibody (ab214342) was conjugated to NHS activated magnetic beads at 1 mg of antibody per 1 ml of slurry.

20 ul of resulting slurry was combined with 200 ug of protein extracted from HeLa cells using RIPA buffer.

Samples were analysed by western blot using anti Gelsolin primary antibody (ab74420 at 1 ug/ml) and anti Rabbit secondary antibody (ab201489 at 1/50000).

Lane 1: 10% input

Lane 2: Immunoprecipitated material



**All lanes :** Anti-Gelsolin antibody (ab214342) at 1 µg/ml

**Lane 1 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 2 :** Human kidney tissue lysate - total protein

**Lane 3 :** THP1 (Human acute monocytic leukemia cell line) Whole Cell Lysate

**Lane 4 :** MCF7 (Human breast adenocarcinoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Mouse monoclonal [M2] to DDDDK tag - (Equivalent to FLAG antibodies from Sigma) (HRP) ([ab49763](#)) at 1/1000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 86 kDa

**Observed band size:** 86 kDa

**Exposure time:** 10 minutes

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with abX overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution [ab133406](#).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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