abcam

Product datasheet

Anti-Gelsolin antibody [EPR1942] - BSA and Azide free ab236029

KO VALIDATED Recombinant RabMAb

4 Images

Overview

Product name	Anti-Gelsolin antibody [EPR1942] - BSA and Azide free
Description	Rabbit monoclonal [EPR1942] to Gelsolin - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, WB **Unsuitable for:** Flow Cyt (Intra),ICC/IF or IP
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human kidney tissue. WB: HeLa cell lysate.
General notes	ab236029 is the carrier-free version of **ab109014**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1942
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab236029 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
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Predicted molecular weight: 86 kDa.

Application notes Is unsuitable for Flow Cyt (Intra),ICC/IF or IP.

Target

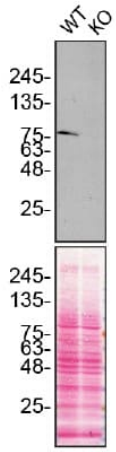
Function Calcium-regulated, actin-modulating protein that binds to the plus (or barbed) ends of actin monomers or filaments, preventing monomer exchange (end-blocking or capping). It can promote the assembly of monomers into filaments (nucleation) as well as sever filaments already formed. Plays a role 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



Western blot - Anti-Gelsolin antibody [EPR1942] - BSA and Azide free (ab236029)

All lanes : Anti-Gelsolin antibody [EPR1942] (**ab109014**) at 1/20000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : GSN knockout HeLa cell lysate

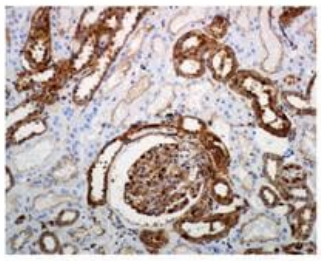
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 86 kDa

This data was developed using the same antibody in a different buffer formulation (**ab109014**).

ab109014 was shown to react with GSN in wild-type HeLa cells in Western blot with loss of signal observed in GSN knockout cell line **ab265201** (GSN knockout cell lysate **ab257204**). Wild-type HeLa and GSN knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 5% milk in TBST for 1 hr before incubation with **ab109014** overnight at 4 °C at a 1/20000 dilution. Blots were incubated with goat anti-rabbit HRP secondary antibodies at 1/5000 before imaging. These data were provided by YCharOS Inc., an open science company with the mission of characterizing commercially available antibody reagents for all human proteins. Abcam and YCharOS are working together to help address the reproducibility crisis by enabling the life science community to better evaluate commercially available antibodies.

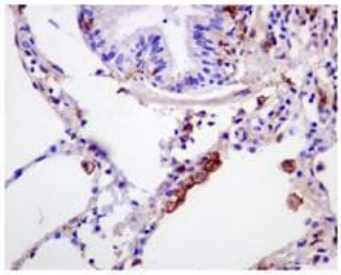


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Gelsolin antibody [EPR1942] - BSA and Azide free (ab236029)

Immunohistochemical analysis of Gelsolin expression in paraffin-embedded human kidney tissue using **ab109014** at 1/250 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109014**).

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Gelsolin antibody [EPR1942] - BSA and Azide free (ab236029)

Immunohistochemical analysis of Gelsolin expression in paraffin-embedded Human lung tissue using **ab109014** at 1/250 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab109014**).

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.

Anti-Gelsolin antibody [EPR1942] - BSA and Azide free (ab236029)

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