abcam

ab271136

Anti-VIRMA/KIAA1429 antibody [EPR24279-23]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR24279-23
Purification technique	Affinity purification Protein A
Concentration	0.525 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC

Not recommended

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Species	Human
Dilution info	1/50
Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information VIRMA

Function

Associated component of the WMM complex, a complex that mediates N6-methyladenosine (m6A) methylation of RNAs, a modification that plays a role in the efficiency of mRNA splicing and RNA processing (PubMed:24981863, PubMed:29507755). Acts as a key regulator of m6A methylation by promoting m6A methylation of mRNAs in the 3'-UTR near the stop codon: recruits the catalytic core components METTL3 and METTL14, thereby guiding m6A methylation at specific sites (PubMed:29507755). Required for mRNA polyadenylation via its role in selective m6A methylation: m6A methylation of mRNAs in the 3'-UTR near the stop codon correlating with alternative polyadenylation (APA) (PubMed:29507755).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot

Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	VIRMA also known as KIAA1429 is a protein with an essential role in the RNA N6-adenosine methylation process often referred to as m6A modification. It has a molecular mass around 200 kDa and is expressed widely across various tissues prominently in the brain liver and kidney. As a component of the m6A methylation machinery it associates with other proteins that determine m6A methyltransferase activity.
Biological function summary	This protein plays a significant part in mRNA modification by acting as an important component of the m6A writer complex. It contributes to the regulation of gene expression by modulating mRNA stability and translation. The m6A writer complex which includes METTL3 METTL14 and WTAP often coordinates with VIRMA to ensure proper mRNA methylation affecting cellular processes such as differentiation and proliferation. Its involvement in this complex implies its importance for mRNA metabolism and gene expression regulation.
Pathways	VIRMA significantly impacts the RNA processing and degradation pathways. Within these pathways it interacts with proteins such as METTL3 and METTL14 to influence mRNA splicing and degradation which are vital for cellular homeostasis. Moreover VIRMA is closely linked to the circadian rhythm pathway. It regulates mRNA targets affecting the rhythmic expression of clock genes underlining cellular timing mechanisms.
Associated diseases and disorders	VIRMA is connected to cancer and metabolic disorders. Alterations in its methylation activity correlate with tumorigenesis and cancer progression particularly in liver cancer. It cooperates with proteins like METTL3 in promoting oncogenic mRNA translation leading to uncontrolled cell growth. Additionally dysregulation of RNA methylation involving VIRMA influences the metabolism contributing to disorders like obesity. This makes it an attractive target for therapeutic strategies aiming to modulate abnormal methylation patterns.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

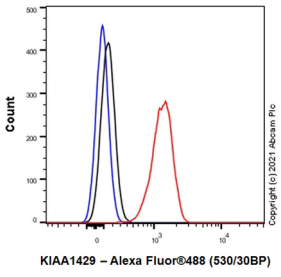
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

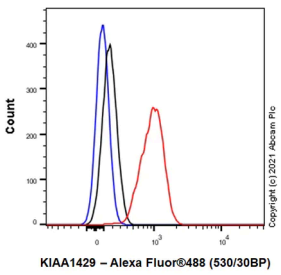
5 product images



Flow Cytometry (Intracellular) - Anti-VIRMA/KIAA1429 antibody [EPR24279-23] (ab271136)

VIRMA/KIAA1429 Flow Cytometry (Intracellular) staining using rabbit Anti-VIRMA/KIAA1429 antibody

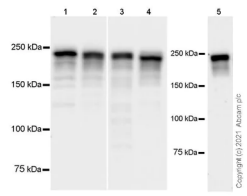
Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol permeabilized HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling VIRMA/KIAA1429 with ab271136 at 1/50 dilution (red) compared with a Rabbit monoclonal IgG (ab172730) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-VIRMA/KIAA1429 antibody [EPR24279-23] (ab271136)

VIRMA/KIAA1429 Flow Cytometry (Intracellular) staining using rabbit Anti-VIRMA/KIAA1429 antibody

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol permeabilized C2C12 (Mouse myoblasts myoblast) cells labeling VIRMA/KIAA1429 with ab271136 at 1/50 dilution (red) compared with a Rabbit monoclonal IgG (ab172730) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.



Western blot - Anti-VIRMA/KIAA1429 antibody [EPR24279-23] (ab271136)

VIRMA/KIAA1429 Western blot staining using rabbit Anti-VIRMA/KIAA1429 antibody

The observed MW are consistent with what has been described in the literature (PMID: 34490238).
Blocking and dilution buffer: 5% NFDM/TBST.

All lanes:
Western blot - Anti-VIRMA/KIAA1429 antibody [EPR24279-23] (ab271136) at 1/1000 dilution

Lane 1:
PC-3 (human prostate adenocarcinoma epithelial cell), whole cell lysate at 20 µg

Lane 2:
SK-OV-3 (human ovarian cancer epithelial cell), whole cell lysate at 20 µg

Lane 3:
T-47D (human ductal breast epithelial tumor epithelial cell), whole cell lysate at 20 µg

Lane 4:
C2C12 (mouse myoblasts), whole cell lysate at 20 µg

Lane 5:
Mouse liver cancer lysate at 20 µg

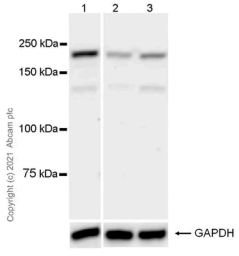
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 202 kDa

Observed band size: 202 kDa

Exposure time: 26s



Western blot - Anti-VIRMA/KIAA1429 antibody [EPR24279-23] (ab271136)

VIRMA/KIAA1429 Western blot staining using rabbit Anti-VIRMA/KIAA1429 antibody

Lysates should be made freshly and used in WB immediately to minimize protein degradation.
Blocking and dilution buffer: 5% NFDM/TBST.

All lanes:

Western blot - Anti-VIRMA/KIAA1429 antibody [EPR24279-23] (ab271136) at 1/1000 dilution

Lane 1:
HeLa transfected with scrambled siRNA control whole cell lysate at 20 µg

Lane 2:
HeLa transfected with GATA-2 siRNA 1 whole cell lysate at 20 µg

Lane 3:
HeLa transfected with GATA-2 siRNA 2 whole cell lysate at 20 µg

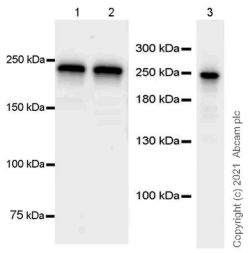
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 202 kDa

Observed band size: 202 kDa

Exposure time: 59s



Western blot - Anti-VIRMA/KIAA1429 antibody [EPR24279-23] (ab271136)

VIRMA/KIAA1429 Western blot staining using rabbit Anti-VIRMA/KIAA1429 antibody

Lysates should be made freshly and used in WB immediately to minimize protein degradation. Blocking and dilution buffer: 5% NFDM/TBST.

All lanes:
Western blot - Anti-VIRMA/KIAA1429 antibody [EPR24279-23] (ab271136) at 1/1000 dilution

Lane 1:
MCF7 (human breast adenocarcinoma epithelial cell), whole cell lysate at 20 µg

Lane 2:
HeLa (human cervix adenocarcinoma epithelial cell), whole cell lysate at 20 µg

Lane 3:
K562 (human chronic myelogenous leukemia lymphoblast), whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 202 kDa

Observed band size: 202 kDa

Exposure time: 26s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.