abcam

ab181139

Anti-CoREST antibody [EPR13826(B)]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	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	EPR13826(B)
Purification technique	Affinity purification Protein A
Concentration	0.791 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/150
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information RCOR1

Function	Essential component of the BHC complex, a corepressor complex that represses transcription of neuron-specific genes in non-neuronal cells. The BHC complex is recruited at RE1/NRSE sites by REST and acts by deacetylating and demethylating specific sites on histones, thereby acting as a chromatin modifier. In the BHC complex, it serves as a molecular beacon for the recruitment of molecular machinery, including MeCP2 and SUV39H1, that imposes silencing across a chromosomal interval. Plays a central role in demethylation of Lys-4 of histone H3 by promoting demethylase activity of KDM1A on core histones and nucleosomal substrates. It also protects KDM1A from the proteasome. Component of a RCOR/GFI/KDM1A/HDAC complex that suppresses, via histone deacetylase (HDAC) recruitment, a number of genes implicated in multilineage blood cell development and controls hematopoietic differentiation.

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	The CoREST protein also known as REST corepressor 1 is a 58 kDa protein that mechanically functions in chromatin remodeling and gene silencing. CoREST localizes to the nucleus and functions in the repression of neuronal genes in non-neuronal tissues. This protein is pivotal in assembling histone deacetylase complexes which makes it essential in epigenetic regulation. CoREST is expressed in various tissues throughout the body playing an important role in maintaining non-neuronal gene expression.
Biological function summary	CoREST interacts with multiple partners to form a corepressor complex. This complex includes LSD1 (lysine-specific demethylase 1) and HDAC1/2 (histone deacetylases 1 or 2) facilitating transcriptional repression. CoREST regulates the expression of genes involved in neurogenesis and cell differentiation processes. Its role is critical in maintaining the balance between neuronal and non-neuronal gene expression by modifying chromatin states.
Pathways	CoREST is involved in histone modification and gene expression regulation pathways. One significant pathway is the REST (RE1-Silencing Transcription factor) pathway where CoREST serves as a core component. In this pathway CoREST interacts with REST a transcriptional repressor to silence neural genes in a non-neuronal context. Another involved pathway is the chromatin remodeling pathway where CoREST associates with LSD1 and other chromatin-modifying enzymes to alter chromatin structure and gene accessibility.
Associated diseases and disorders	CoREST has connections to neurological disorders and cancer. Altered CoREST expression or function links to the progression of neurodegenerative diseases such as Huntington's disease. CoREST dysregulation also relates to certain cancer types where misexpression can contribute to tumorigenesis. In the context of these disorders CoREST often collaborates with LSD1 affecting the transcriptional landscape of affected cells showcasing the importance of CoREST in disease mechanisms.

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

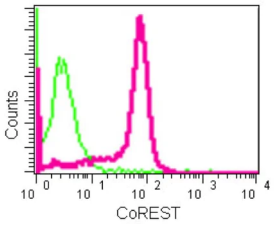
We do not recommend this combination. It is not covered by our product promise.

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.

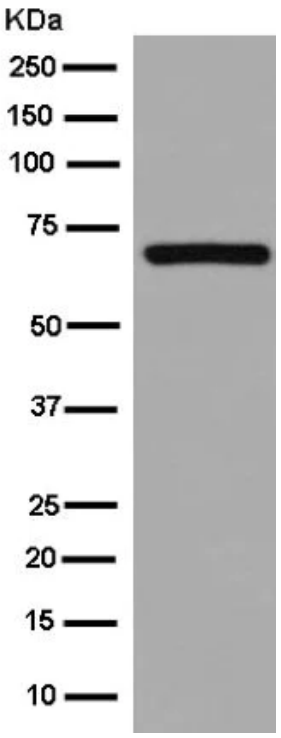
3 product images



Flow Cytometry (Intracellular) - Anti-CoREST antibody [EPR13826(B)] (ab181139)

CoREST Flow Cytometry (Intracellular) staining using rabbit Anti-CoREST antibody

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixedJurkat cells labeling CoREST with ab181139 at 1/150 (red) compared to a Rabbit monoclonal IgG isotype control (green), followed by Goat anti rabbit IgG (FITC) secondary antibody at 1/150 dilution.



Western blot - Anti-CoREST antibody [EPR13826(B)] (ab181139)

CoREST Western blot staining of MOLT4 cell lysate using rabbit Anti-CoREST antibody

All lanes:
Western blot - Anti-CoREST antibody [EPR13826(B)] (ab181139) at 1/10000 dilution

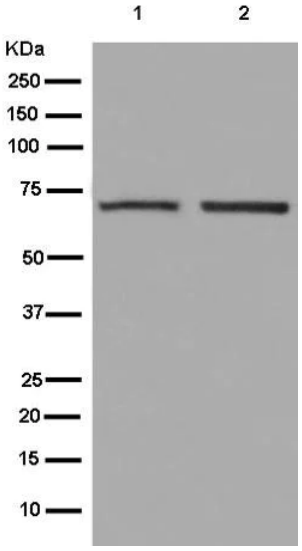
All lanes:
MOLT4 cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 53 kDa

Observed band size: 66 kDa



Western blot - Anti-CoREST antibody [EPR13826(B)] (ab181139)

All lanes:
Western blot - Anti-CoREST antibody [EPR13826(B)] (ab181139) at 1/2000 dilution

Lane 1:
Jurkat cell lysate at 20 µg

Lane 2:
HeLa cell lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 53 kDa

Observed band size: 66 kDa

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