abcam

ab250641

Anti-NELF antibody [EPR8976(2)] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR8976(2)
Purification technique	Affinity purification Protein A
Concentration	1.034 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	-

Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information NSMF

Function	Couples NMDA-sensitive glutamate receptor signaling to the nucleus and triggers long-lasting changes in the cytoarchitecture of dendrites and spine synapse processes. Part of the cAMP response element-binding protein (CREB) shut-off signaling pathway. Stimulates outgrowth of olfactory axons and migration of gonadotropin-releasing hormone (GnRH) and luteinizing-hormone-releasing hormone (LHRH) neuronal cells.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab250641 is the carrier-free version of ab183022.

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.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. 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.

Compatibility
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.

Supplementary info

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

Activity summary	NELF also known as Negative Elongation Factor consists of four subunits with an approximate molecular mass of 200 kDa. NELF is expressed in various tissues and plays a mechanical role in RNA polymerase II pausing during early transcription elongation. NELF temporarily halts the transcription process by binding the elongation complex affecting the progression of gene expression.
Biological function summary	The interaction of NELF with other initiation factors ensures proper RNA synthesis regulation. NELF forms a part of a complex with DSIF (DRB Sensitivity-Inducing Factor) and RNA polymerase II stabilizing the paused state of transcription. This regulatory action assists in controlling the timing of gene expression and allows other regulatory factors to modify transcription machinery or the chromatin environment.
Pathways	NELF participates in transcription regulation pathways including the c-myc pathway and the heat shock response. In the context of the c-myc pathway NELF works alongside proteins like P-TEFb which helps transition RNA polymerase II from the paused state to productive elongation. This cooperation ensures a responsive and tightly regulated transcription process.
Associated diseases and disorders	Several cancers and cardiac diseases link to the improper regulation of NELF. Dysregulation of NELF and P-TEFb interactions correlates with aberrant transcription elongation control contributing to tumor development. Similarly disruptions in the heat shock response pathway can lead to cardiac disorders with HSF1 (Heat Shock Factor 1) interacting with NELF during stress response regulation.

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

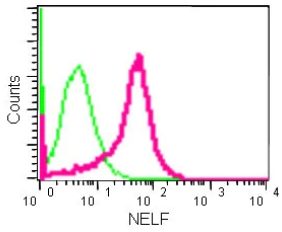
We do not recommend this combination. It is not covered by our product promise.

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.

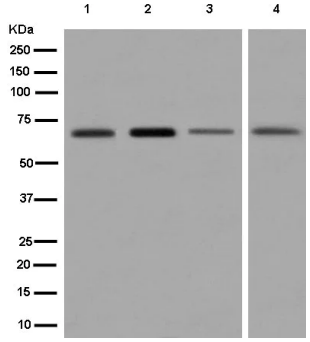
2 product images



Flow Cytometry (Intracellular) - Anti-NELF antibody [EPR8976(2)] - BSA and Azide free (ab250641)

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

This data was developed using ab183022, the same antibody clone in a different buffer formulation.
Intracellular Flow Cytometry analysis of PC3 cells labeling NELF using ab183022 at 1/300 dilution. A Goat anti rabbit IgG (FITC) at 1/150 dilution was used as secondary antibody. Cells were fixed with 2% paraformaldehyde. Isotype control: Rabbit monoclonal IgG.



Western blot - Anti-NELF antibody [EPR8976(2)] - BSA and Azide free (ab250641)

This data was developed using ab183022, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-NELF antibody [EPR8976(2)] (ab183022) at 1/1000 dilution

Lane 1:
Human fetal liver lysate at 10 µg

Lane 2:
Human fetal kidney lysate at 10 µg

Lane 3:
Human colon cancer lysate at 10 µg

Lane 4:
Human testis lysate at 10 µg

Secondary

All lanes:
Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 60 kDa

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