abcam

ab250257

Anti-DDX39 antibody [EPR13508] - 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	EPR13508
Purification technique	Affinity purification Protein A
Concentration	1.057 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-

Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information DDX39A

Function Helicase that plays an essential role in mRNA export and is involved in multiple steps in RNA metabolism including alternative splicing (PubMed:33941617, PubMed:38801080). Regulates nuclear mRNA export to the cytoplasm through association with ECD (PubMed:33941617). Also involved in spliceosomal uridine-rich small nuclear RNA (U snRNA) export by stimulating the RNA binding of adapter PHAX (PubMed:39011894). Plays a role in the negative regulation of type I IFN production by increasing the nuclear retention of antiviral transcripts and thus reducing their protein expression (PubMed:32393512). Independently of the interferon pathway, plays an antiviral role against alphaviruses by binding to a 5' conserved sequence element in the viral genomic RNA (PubMed:37949067).

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

ab250257 is the carrier-free version of ab180857.

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	The DDX39 protein also known as DDX39A or BAT1 belongs to the DEAD box family of proteins and has a molecular mass of approximately 49 kDa. Mechanically DDX39 functions as an RNA helicase which plays a critical role in the unwinding of RNA secondary structures during various RNA metabolic processes. The protein facilitates RNA splicing transport and translation by interacting with these fundamental cellular mechanisms. DDX39 is widely expressed in various tissues including liver heart and brain highlighting its importance across different biological systems.
Biological function summary	The multifunctional attributes of DDX39 contribute significantly to RNA processing events. The protein serves as an integral part of the TREX (transcription/export) complex which mediates the export of mRNA from the nucleus to the cytoplasm. By unwinding RNA DDX39 ensures proper mRNA maturation and transport essential for accurate gene expression. The involvement of DDX39 in the TREX complex highlights its central role in maintaining cellular homeostasis.
Pathways	DDX39 participates actively in gene expression and mRNA processing pathways. The protein's role in the TREX complex links it to the mRNA export pathway important for synthesizing proteins and cell cycle progression. Through its activities DDX39 interacts with related proteins such as ALYREF and UAP56

	coordinating the transfer of mRNA. These interactions highlight its collaborative function within complex cellular processes.
Associated diseases and disorders	DDX39 has connections to cancer including breast and lung cancer where altered mRNA processing contributes to tumor progression. The protein associates closely with other mRNA processing components like ALYREF where dysregulated interactions might influence cancer cell proliferation. Additionally DDX39 abnormalities have associations with spinal muscular atrophy where its involvement in RNA processing affects motor neuron health. This links DDX39 through its complex roles in both cancer and neurodegenerative disorders.

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

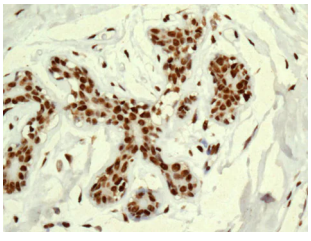
We do not recommend this combination. It is not covered by our product promise.

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.

4 product images

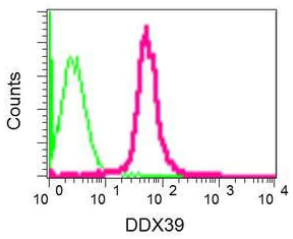


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DDX39 antibody [EPR13508] - BSA and Azide free (ab250257)

DDX39 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-DDX39 antibody

This data was developed using ab180857, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of Human breast tissue, staining DDX39 with ab180857 at 1/100 dilution.

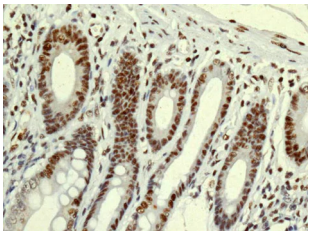
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-DDX39 antibody [EPR13508] - BSA and Azide free (ab250257)

DDX39 Flow Cytometry (Intracellular) staining using rabbit Anti-DDX39 antibody

This data was developed using ab180857, the same antibody clone in a different buffer formulation.
Intracellular Flow Cytometry analysis of DDX39 expression in permeabilized Jurkat cells using ab180857 at 1/10 dilution (red) and a rabbit IgG as negative control (green).

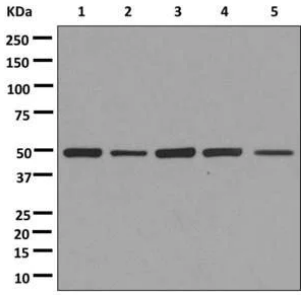


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-DDX39 antibody [EPR13508] - BSA and Azide free (ab250257)

DDX39 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-DDX39 antibody

This data was developed using ab180857, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of Human colon tissue, staining DDX39 with ab180857 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-DDX39 antibody [EPR13508] - BSA and Azide free (ab250257)

This data was developed using ab180857, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-DDX39 antibody [EPR13508] (ab180857) at 1/5000 dilution

Lane 1:
Jurkat cell lysate at 10 µg

Lane 2:
A431 cell lysate at 10 µg

Lane 3:
HeLa cell lysate at 10 µg

Lane 4:
HepG2 cell lysate at 10 µg

Lane 5:
Human seminoma tissue lysate at 10 µg

Predicted band size: 49 kDa

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