abcam

ab248997

Anti-TOX3 antibody [EPR6173(2)(B)] - 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	EPR6173(2)(B)
Purification technique	Affinity purification

Reactivity data

ICC/IF

Not recommended

Species	Human, 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	-

IHC-P

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 TOX3

Function	Transcriptional coactivator of the p300/CBP-mediated transcription complex. Activates transactivation through cAMP response element (CRE) sites. Protects against cell death by inducing antiapoptotic and repressing pro-apoptotic transcripts. Stimulates transcription from the estrogen-responsive or BCL-2 promoters. Required for depolarization-induced transcription activation of the C-FOS promoter in neurons. Associates with chromatin to the estrogen-responsive C3 promoter region.

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

ab248997 is the carrier-free version of ab151548.

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	TOX3 also known as TOX high mobility group box family member 3 is a transcription factor with a significant role in chromatin remodeling and gene expression regulation. It has a molecular mass of approximately 60 kDa. TOX3 mainly gets expressed in neuronal tissues but it is also found in breast tissue and embryonic development sites. As a transcription factor TOX3 influences cellular processes by binding to DNA and interacting with other proteins to control the transcription of target genes. Through these interactions TOX3 can activate or suppress specific genes in different contexts.
Biological function summary	TOX3 interacts with other components to influence neural development and neuroplasticity. It does not strictly operate as a lone factor; rather it associates with protein complexes for its functions. This protein plays an important part in the survival and function of neurons. In breast tissue TOX3 may influence cellular architecture and receptor signaling pathways that are important for tissue differentiation and maintenance. The dynamic role of TOX3 in various tissues marks it as a versatile regulator essential for a broad range of cellular processes.
Pathways	TOX3 integrates into the Wnt signaling and estrogen receptor pathways. These pathways are critical for developmental processes and cell fate determination. Within the Wnt signaling pathway TOX3 interacts with downstream effectors to modulate the transcriptional outcomes. In relation to the estrogen receptor pathway TOX3 links with other transcription factors such as FOXA1 to regulate target genes in hormone-responsive tissues. These interactions place TOX3 as a significant intermediary in conveying signals from external cues to drive specific cellular outcomes.
Associated diseases and disorders	TOX3 links closely to breast cancer and neurodegenerative diseases like Alzheimer's disease. In breast cancer alterations in TOX3 expression levels correlate with disease progression and prognosis often in connection with altered functions of estrogen receptors and BRCA1. In neurodegenerative contexts TOX3 participates in pathways affecting neuronal survival and may share mechanistic links with proteins like APP linked to Alzheimer's disease pathology. The dual involvement in cancer and neurological diseases highlights TOX3 as a potential target for therapeutic intervention.

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.

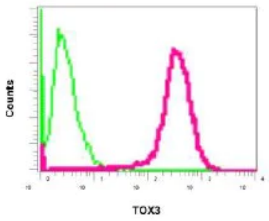
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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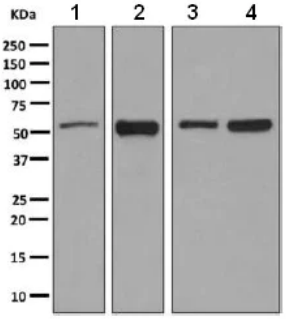
2 product images



Flow Cytometry (Intracellular) - Anti-TOX3 antibody [EPR6173(2)(B)] - BSA and Azide free (ab248997)

TOX3 Flow Cytometry (Intracellular) staining using rabbit Anti-TOX3 antibody

This data was developed using ab151548, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized SH-SY5Y cells labeling TOX3 with ab151548 at 1/10 dilution (red), compared to a rabbit IgG negative control antibody (green).



Western blot - Anti-TOX3 antibody [EPR6173(2)(B)] - BSA and Azide free (ab248997)

This data was developed using ab151548, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-TOX3 antibody [EPR6173(2)(B)] (ab151548) at 1/1000 dilution

Lane 1:
A431 cell lysate at 10 µg

Lane 2:
SH-SY5Y cell lysate at 10 µg

Lane 3:
MDA-MB-435 cell lysate at 10 µg

Lane 4:
Fetal brain lysate at 10 µg

Secondary

All lanes:
HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 63 kDa

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