abcam

ab249086

Anti-KBTBD8 antibody [EPR10698(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	EPR10698(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)

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information KBTBD8

Function	Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex that acts as a regulator of neural crest specification (PubMed:26399832). The BCR(KBTBD8) complex acts by mediating monoubiquitination of NOLC1 and TCOF1: monoubiquitination promotes the formation of a NOLC1-TCOF1 complex that acts as a platform to connect RNA polymerase I with enzymes responsible for ribosomal processing and modification, leading to remodel the translational program of differentiating cells in favor of neural crest specification (PubMed:26399832).

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

ab249086 is the carrier-free version of ab154189.

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	KBTBD8 also known as Kelch repeat and BTB domain-containing protein 8 serves a mechanical role in the stabilization and ubiquitination processes. It functions as an adapter protein connecting specific substrates to a core ubiquitin ligase complex facilitating substrate degradation through the proteasome. KBTBD8 has an approximate mass of 69 kDa. In terms of expression KBTBD8 is found in various tissues with significant levels observed in the brain and developing tissues indicating its importance in developmental processes.
Biological function summary	KBTBD8 acts in cellular regulation and developmental processes. It is involved in the formation of a complex that mediates specific substrate recognition essential for precise protein turnover and cellular homeostasis. Evidence shows its role in neural tube development by regulating cytoskeletal dynamics emphasizing its contribution to embryonic morphogenesis. KBTBD8 activity requires interaction with other molecules in the ubiquitination pathway ensuring regulated proteolysis necessary for normal cellular function.
Pathways	The involvement of KBTBD8 extends into the ubiquitin-proteasome pathway and cytoskeletal regulation pathways. An important pathway includes its association with CRL4 E3 ligase complex a critical component that modulates cell cycle progression and response to DNA damage. Through these pathways KBTBD8 interacts with proteins such as CUL4 and DDB1 which play essential roles in maintaining genomic stability and cellular integrity.
Associated diseases and disorders	KBTBD8 relates to conditions like neural tube defects and certain cancers. Its abnormal expression or malfunction may contribute to improper embryonic development manifesting as neural tube defects. Furthermore disrupted regulation of the ubiquitination pathway involving KBTBD8 can lead to oncogenesis with proteins such as p53 being affected through altered ubiquitin-mediated processes. These associations highlight the significance of KBTBD8 in maintaining cellular and developmental equilibrium.

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

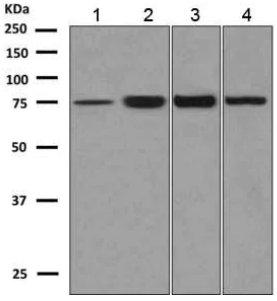
We do not recommend this combination. It is not covered by our product promise.

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.

1 product image



Western blot - Anti-KBTBD8 antibody [EPR10698(B)] - BSA and Azide free (ab249086)

This data was developed using ab154189, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-KBTBD8 antibody [EPR10698(B)] (ab154189) at 1/1000 dilution

Lane 1:
fetal liver lysate at 10 µg

Lane 2:
HT-1080 cell lysate at 10 µg

Lane 3:
Human tonsil lysate at 10 µg

Lane 4:
A431 cell lysate at 10 µg

Predicted band size: 69 kDa

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