abcam

ab248845

Anti-WDR68 antibody [EPR8712] - 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	EPR8712
Purification technique	Affinity purification Protein A
Concentration	1.023 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	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information DCAF7

Function	Involved in craniofacial development. Acts upstream of the EDN1 pathway and is required for formation of the upper jaw equivalent, the palatoquadrate. The activity required for EDN1 pathway function differs between the first and second arches (By similarity). Associates with DIAPH1 and controls GLI1 transcriptional activity. Could be involved in normal and disease skin development. May function as a substrate receptor for CUL4-DDB1 E3 ubiquitin-protein ligase complex.

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

ab248845 is the carrier-free version of ab138490.

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	WDR68 also known as DCAF7 or Han11 is a protein with a mass of approximately 40 kDa. It functions mechanically as a scaffold protein facilitating interactions between various signaling molecules. WDR68 is expressed broadly across different tissue types including the brain heart and skeletal muscle. Its role as a scaffold indicates its importance in organizing and stabilizing multi-protein complexes that regulate numerous cellular processes.
Biological function summary	The WDR68 protein interacts with other cellular components to regulate signaling pathways important for cell proliferation and differentiation. It forms a part of the STRIPAK complex which plays a role in modulating developmental processes and cellular stress responses. The protein contributes to the maintenance of cellular structure and function influencing activities like gene expression and signal transduction.
Pathways	WDR68 operates within the MAPK and JNK signaling pathways both of which are essential for transmitting external stimuli to intracellular responses. Within the MAPK pathway WDR68 interacts with kinases such as MAP3Ks facilitating the transduction of mitogenic signals. The JNK pathway involves proteins like MKK4 with WDR68 playing a role in modulating various cellular responses including those involved in apoptosis and stress responses.
Associated diseases and disorders	WDR68 associates with craniofacial development abnormalities as its interaction with the DYRK1A protein influences cellular signaling during neural crest cell development. Mutations or dysregulations in WDR68 are also linked to cancer progression due to its role in the MAPK pathway affecting cell cycle regulation and apoptosis. The relationship between WDR68 and cancer highlights the involvement of proteins such as MKK4 making it significant in therapeutic research targeting these pathways.

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.

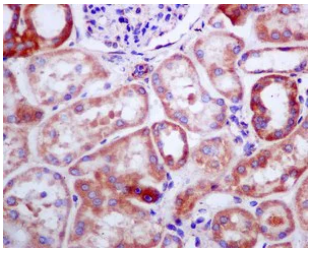
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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3 product images

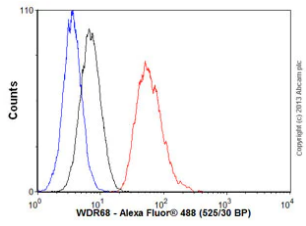


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-WDR68 antibody [EPR8712] - BSA and Azide free (ab248845)

WDR68 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-WDR68 antibody

This data was developed using ab138490, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human kidney tissue labelling WDR68 with ab138490 at 1/100 dilution.

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

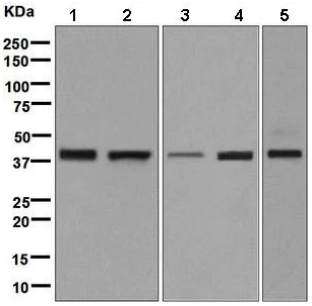


Flow Cytometry (Intracellular) - Anti-WDR68 antibody [EPR8712] - BSA and Azide free (ab248845)

WDR68 Flow Cytometry (Intracellular) staining using rabbit Anti-WDR68 antibody

This data was developed using ab138490, the same antibody clone in a different buffer formulation.
Overlay histogram showing HeLa cells stained with ab138490 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-

protein interactions followed by the antibody (ab138490, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Western blot - Anti-WDR68 antibody [EPR8712] - BSA and Azide free (ab248845)

This data was developed using ab138490, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-WDR68 antibody [EPR8712] (ab138490) at 1/1000 dilution

Lane 1:
Fetal brain lysate at 10 µg

Lane 2:
BxPC-3 lysate at 10 µg

Lane 3:
HeLa lysate at 10 µg

Lane 4:
293T lysate at 10 µg

Lane 5:
Fetal heart lysate at 10 µg

Secondary

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

Predicted band size: 39 kDa

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