abcam

ab151575

Anti-HoxC6 antibody [EPR7922(2)]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR7922(2)
Purification technique	Affinity purification Protein A
Concentration	0.618 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

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	1/1000 - 1/10000
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	1/100 - 1/500
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information HOXC6

Function	Sequence-specific transcription factor which is part of a developmental regulatory system that provides cells with specific positional identities on the anterior-posterior axis.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Notes

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.

Supplementary info

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

Activity summary	HoxC6 also known as Homeobox C6 is a transcription factor that guides the formation of body structure during early development. The protein weighs approximately 25 kDa and plays an important role in sequencing and pattern formation in the embryonic development stages. It is expressed mainly in the central nervous system and developing tissues but also shows functionality in adult tissues. The activity of HoxC6 affects cellular differentiation and proliferation by regulating specific gene expression in these regions.
Biological function summary	The protein binds to DNA at specific sequences to activate or repress target gene transcription. This can affect cell fate and organ morphogenesis. HoxC6 associates with other Hox proteins and cofactors to form complexes that enhance or modify its regulatory functions. These interactions with cofactor proteins further strengthen its impact on developmental processes ensuring accurate tissue and organ formation.
Pathways	HoxC6 functions within pivotal developmental pathways such as the Hox gene regulatory network. This network synchronizes with signaling pathways like the Wnt and Notch controlling cell proliferation and differentiation. The collaboration with these pathways allows HoxC6 to manage gene cascades that maintain the correct body patterning. HoxB5 a related protein in the same pathway often interacts or shares similar roles coordinating to maintain orderly tissue patterning.
Associated diseases and disorders	Malfunction or mis-expression of HoxC6 links to certain cancers including leukemia and breast cancer. The protein's deregulation can lead to abnormal cell growth and differentiation. It works alongside proteins like Myc which also plays a central role in cancer to influence oncogenesis. Studies continue to explore HoxC6's involvement in these diseases considering its role in normal cellular development and potential therapeutic targeting.

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

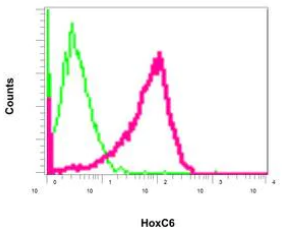
We do not recommend this combination. It is not covered by our product promise.

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.

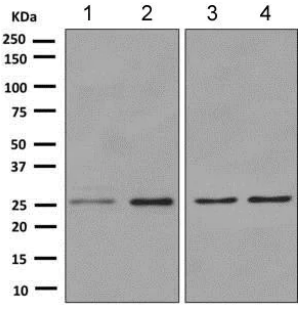
3 product images



Flow Cytometry (Intracellular) - Anti-HoxC6 antibody [EPR7922(2)] (ab151575)

HoxC6 Flow Cytometry (Intracellular) staining using rabbit Anti-HoxC6 antibody

Intracellular flow cytometric analysis of permeabilized MCF7 cells labeling HoxC6 with ab151575 at 1/100 dilution (red), compared to a Rabbit IgG negative control antibody (green).



Western blot - Anti-HoxC6 antibody [EPR7922(2)] (ab151575)

HoxC6 Western blot staining using rabbit Anti-HoxC6 antibody

All lanes:
Western blot - Anti-HoxC6 antibody [EPR7922(2)] (ab151575) at 1/1000 dilution

Lane 1:
HUVEC cell lysate at 10 µg

Lane 2:
PC3 cell lysate at 10 µg

Lane 3:
MCF7 cell lysate at 10 µg

Lane 4:
Jurkat cell lysate at 10 µg

Secondary

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

Predicted band size: 26 kDa

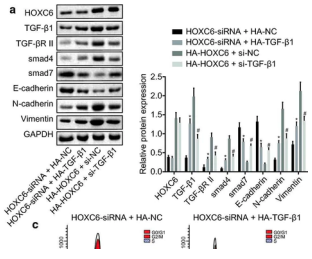


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Western blot - Anti-HoxC6 antibody [EPR7922(2)] (ab151575)

HoxC6 Western blot staining using rabbit Anti-HoxC6 antibody

HoxC6 western blot using anti-HoxC6 antibody [EPR7922(2)] ab151575. Publication image and figure legend from Zhang, F., Ren, C. C., et al., 2018, Cancer Cell Int, PubMed 30559605.

ab151575 was used in this publication in western blot. This may not be the same as the application(s) guaranteed by Abcam. For a full list of applications guaranteed by Abcam for ab151575 please see the product overview.

HOXC6 gene silencing inhibits EMT and proliferative ability of CC cells by suppressing the activation of the TGF-β/smad signaling pathway. a Protein expression of HOXC6, TGF-β1, TGF-β RII,

smad4, smad7, E-cadherin, N-cadherin, and Vimentin determined by western blot analysis; b cell proliferation in each group after transduction; c cell cycle in each group after transduction; d cell apoptosis in each group after transduction; *p < 0.05, compared with the HOXC6-siRNA + HA-NC group; #p < 0.05, compared with the HA-HOXC6 + si-NC group; HOXC6, homeobox C6; EMT, epithelial-mesenchymal transition; CC cervical carcinoma, TGF-β transforming growth factor-β, smad solvated metal atom dispersion, NC negative control

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