abcam

ab109375

Anti-HOXB5 antibody [EP2827]

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	EP2827
Purification technique	Affinity purification Protein A
Concentration	0.38 - 0.393 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	-

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	1/10 - 1/100
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 HOXB5

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	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Stable for 12 months at -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.

Supplementary info

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

Activity summary	HOXB5 also known as Homeobox B5 acts as a transcription factor within the body. This gene-encoded protein weighs approximately 29 kDa and plays an essential role in the development and differentiation of various tissues. It exhibits expression in a range of tissues including the blood and nervous systems. By binding to DNA HOXB5 assists in regulating the expression of genes important for body patterning and cellular function.
Biological function summary	The HOXB5 protein influences early development processes and organogenesis. It contributes significantly to the establishment of anterior-posterior body axis during embryonic development. HOXB5 does not form part of a larger complex but interacts with other transcription factors and DNA regions to carry out its functions. Its regulation of gene expression has implications for cellular differentiation and tissue specification.
Pathways	HOXB5 plays a significant role in the Wnt signaling and retinoic acid signaling pathways. These pathways govern processes such as cell growth differentiation and axonal development. HOXB5 interacts with other proteins like β-catenin in the Wnt pathway influencing developmental processes through these interactions. Its activity contributes to the orchestration of developmental signals that ensure proper morphological outcomes.

Associated diseases and disorders	Mutations or dysregulation of HOXB5 have connections to certain types of cancer and developmental disorders such as cervical cancer and congenital defects. In these contexts HOXB5 often acts together with proteins like retinoic acid receptors highlighting its role in aberrant cellular proliferation and incorrect tissue formation. Understanding HOXB5's involvement in these diseases highlights its importance as a potential therapeutic target.

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

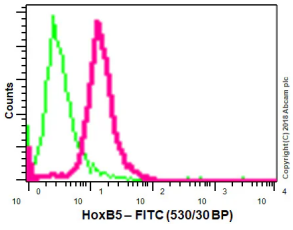
We do not recommend this combination. It is not covered by our product promise.

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.

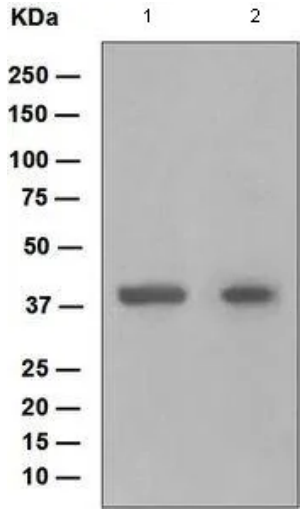
2 product images



Flow Cytometry (Intracellular) - Anti-HOXB5 antibody [EP2827] (ab109375)

HOXB5 Flow Cytometry (Intracellular) staining using rabbit Anti-HOXB5 antibody

ab109375 staining the HOXB5 in U-87 MG (Human glioblastoma-astrocytoma epithelial cell) by intracellular flow cytometry. The sample was incubated with the primary antibody at 1/80 (Pink) for 30 minutes at 4°C. A FITC-conjugated Goat anti-rabbit IgG (1/150) was used as the secondary antibody.
Rabbit monoclonal IgG was used as an Isotype control (Green)



Western blot - Anti-HOXB5 antibody [EP2827] (ab109375)

HOXB5 Western blot staining using rabbit Anti-HOXB5 antibody

All lanes:
Western blot - Anti-HOXB5 antibody [EP2827] (ab109375) at 1/1000 dilution

Lane 1:
Human fetal lung lysate at 10 µg/mL

Lane 2:
Human fetal kidney lysate at 10 µg/mL

Predicted band size: 29 kDa

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