abcam

ab175430

Anti-Twist antibody [10E4E6]

Anti-Twist antibody [10E4E6] (ab175430) is a mouse monoclonal antibody detecting Twist in **Western Blot, Flow Cytometry, IHC-P, ICC/IF**. Suitable for **Human, Mouse**.

- Over 80 publications

Image updates are in progress. Products remain available and covered by the Abcam Product Promise. Learn more.

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human TWIST1 aa 1-100. The exact immunogen used to generate this antibody is proprietary information. Database link Q15672
Clone number	10E4E6
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/200 - 1/400
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Expected

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

Predicted

Species	Chimpanzee, Gorilla, Common marmoset
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

WB

Tested

Species	Transfected cell lysate - Human
Dilution info	1/500 - 1/2000
Notes	Abcam recommends using BSA as the blocking agent.

Species	Mouse
Dilution info	1/500 - 1/2000
Notes	Abcam recommends using BSA as the blocking agent.

Species	Human

Dilution info	1/500 - 1/2000
Notes	Abcam recommends using BSA as the blocking agent.

Predicted

Species	Chimpanzee, Gorilla, Common marmoset
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/200 - 1/1000
Notes	-

Expected

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

Predicted

Species	Chimpanzee, Gorilla, Common marmoset
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/200 - 1/1000
Notes	-

Expected

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

Predicted

Species	Chimpanzee, Gorilla, Common marmoset
Dilution info	-
Notes	-

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

Target data

See full target information TWIST1

Function Acts as a transcriptional regulator. Inhibits myogenesis by sequestrating E proteins, inhibiting trans-activation by MEF2, and inhibiting DNA-binding by MYOD1 through physical interaction. This interaction probably involves the basic domains of both proteins. Also represses expression of pro-inflammatory cytokines such as TNFA and IL1B. Regulates cranial suture patterning and fusion. Activates transcription as a heterodimer with E proteins. Regulates gene expression differentially, depending on dimer composition. Homodimers induce expression of FGFR2 and POSTN while heterodimers repress FGFR2 and POSTN expression and induce THBS1 expression. Heterodimerization is also required for osteoblast differentiation. Represses the activity of the circadian transcriptional activator: NPAS2-BMAL1 heterodimer (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

What is this antibody validated in?
Anti-Twist antibody [10E4E6] (ab175430) is a mouse monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Flow Cyt), Immunohistochemistry (IHC-P), Immunocytochemistry/immunofluorescence (ICC/IF) in Human, Mouse, samples.

What is the molecular weight of Twist?
Anti-Twist [10E4E6] (ab175430) specifically detects a band for Twist (UniProt: Q15672) at a molecular weight of 21kDa.

Trusted by the scientific community
Anti-Twist [10E4E6] (ab175430) was first used in a scientific publication in 2013 and has been cited over 80 times in peer-reviewed journals.

Supplementary info

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

Activity summary	The Twist protein also known as Twist1 is a basic helix-loop-helix (bHLH) transcription factor. It has a molecular mass of approximately 21 kDa. Twist is widely expressed in mesodermal tissues during embryonic development including the somites and limb buds. In adults its expression continues in areas involved in tissue regeneration and wound healing.
Biological function summary	Twist plays significant roles in embryogenesis and in wound healing processes. It functions as an important regulator of mesenchymal cell differentiation and is part of the bHLH family of transcription factors which often form dimers to bind specific DNA sequences. Twist modulates the transcription of genes involved in cell movement and survival. It acts as an important player in the epithelial-mesenchymal transition (EMT) a process important for development and cellular dynamics.

Pathways	Twist integrates into multiple biological networks including the Wnt and Notch signaling pathways. It interacts with proteins like B-catenin in the Wnt pathway and Notch receptors impacting cellular proliferation and fate determination. These interactions highlight its role in regulating cellular behavior and influence various processes such as stem cell maintenance and differentiation.
Associated diseases and disorders	Twist is implicated in cancer and fibrosis. Its overexpression is often observed in aggressive tumors influencing metastasis through its role in EMT. Twist can interact with oncogenic proteins such as MYC in cancer pathways. In fibrosis aberrant Twist activity leads to excessive tissue remodeling and accumulation of connective tissue. Understanding Twist's function and interactions can aid in developing therapeutic strategies targeting these conditions.

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

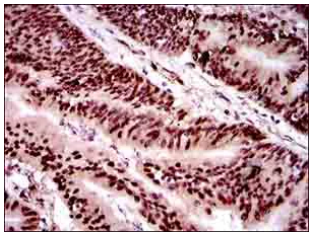
We do not recommend this combination. It is not covered by our product promise.

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.

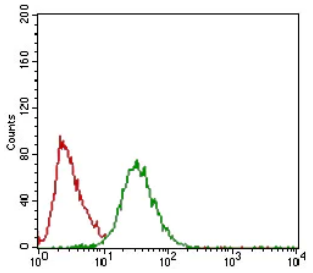
4 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Twist antibody [10E4E6] (ab175430)

Twist Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Twist antibody

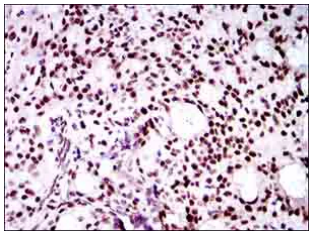
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue labeling Twist with ab175430 at 1/200 dilution, with DAB staining.



Flow Cytometry - Anti-Twist antibody [10E4E6] (ab175430)

Twist Flow Cytometry staining using mouse Anti-Twist antibody

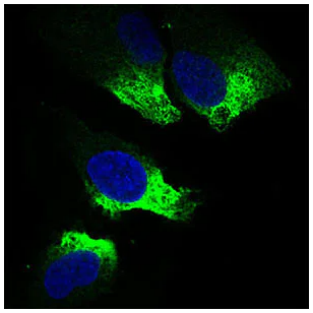
Flow cytometric analysis of HeLa cells labeling Twist with ab175430 at 1/200 dilution (green) compared to a negative control (red).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Twist antibody [10E4E6] (ab175430)

Twist Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-Twist antibody

Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue labeling Twist with ab175430 at 1/200 dilution, with DAB staining.



Immunocytochemistry/ Immunofluorescence - Anti-Twist antibody [10E4E6] (ab175430)

Twist Immunocytochemistry/ Immunofluorescence staining using mouse Anti-Twist antibody

Immunofluorescent analysis of Hela cells labeling Twist with ab175430 at 1/200 dilution (green). Blue: DRAQ5 fluorescent DNA dye.

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