abcam

ab135254

Anti-Brachyury / Bry antibody [6C12]

Mouse Monoclonal Brachyury / Bry antibody. Suitable for Flow Cyt, WB and reacts with Human samples. Cited in 1 publication. Immunogen corresponding to Recombinant Fragment Protein within Human TBXT aa 200-400.

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 TBXT aa 200-400. The exact immunogen used to generate this antibody is proprietary information. Database link O15178
Clone number	6C12
Purification technique	Affinity purification Protein G
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.

WB

Tested

Species	Human
Dilution info	1/500 - 1/2000
Notes	-

Target data

See full target information TBXT

Function	Involved in the transcriptional regulation of genes required for mesoderm formation and differentiation. Binds to a palindromic T site 5'-TTCACACCTAGGTGTGAA-3' DNA sequence and activates gene transcription when bound to such a site.

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

Supplementary info

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

Activity summary	The Brachyury protein also known as Bry or T acts as a transcription factor and belongs to the T-box family of genes. It consists of about 435 amino acids giving it an estimated mass of around 47 kDa. Brachyury plays a critical role in the development of the posterior mesoderm and nucleus pulposus during embryogenesis. It is strongly expressed in the notochord mesoderm and some tumor tissues. The protein's presence can be detected using specific assays such

	as Brachyury IHC (immunohistochemistry) and Brachyury stain which help identify Brachyury marker expression in both normal and pathological states.
Biological function summary	The Brachyury protein influences the morphogenetic movement in mesoderm development. It directly interacts with specific DNA sequences to regulate the transcription of target genes. Brachyury often operates as part of a larger transcriptional complex that manages the differentiation and migration of cells during embryogenesis. The gene's expression indicates mesodermal differentiation and is important for cell fate decisions within developing embryos.
Pathways	Brachyury plays a significant role in the Wnt signaling and the TGF-beta pathways. These pathways are essential in controlling cell proliferation and differentiation. Brachyury directly impacts the regulation of these pathways influencing other proteins like beta-catenin in Wnt signaling. This interconnectedness suggests its broader role in cellular communication and development processes potentially affecting gene expression across these pathways.
Associated diseases and disorders	Brachyury has been associated with various cancers such as chordoma and other related tumors. Chordoma specifically involves the notochord where Brachyury marks the disease's presence. Other proteins like E-cadherin interact with Brachyury in tumor progression and metastasis. Understanding Brachyury's function helps in diagnosing and potentially targeting treatment options for these ailments.

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

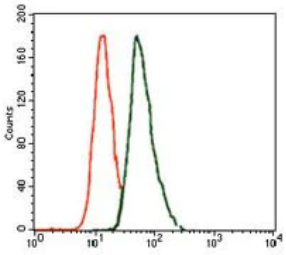
We do not recommend this combination. It is not covered by our product promise.

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



Flow Cytometry - Anti-Brachyury / Bry antibody [6C12] (ab135254)

Brachyury / Bry Flow Cytometry staining using mouse Anti-Brachyury / Bry antibody

Flow cytometric analysis of A549 cells labelling Brachyury-Bry with ab135254 at 1/200 dilution (green) compared with a negative control (red).

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