


Product datasheet

Anti-Twist antibody ab50581

★★★★☆ [14 Abreviews](#) [152 References](#) [2 Images](#)

Overview

Product name	Anti-Twist antibody
Description	Rabbit polyclonal to Twist
Host species	Rabbit
Tested applications	Suitable for: ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Chicken, Chimpanzee 
Immunogen	Synthetic peptide: PADDSLSNSEEEPDRQ conjugated to KLH by a C-terminal Cysteine residue linker, corresponding to amino acids 12-27 of Human Twist

 [Run BLAST with](#)

 [Run BLAST with](#)

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.097% Sodium azide Constituent: 0.0268% PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab50581 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★★ (3)	Use a concentration of 1 - 2 µg/ml.

Target

Function

Acts as a transcriptional regulator. Inhibits myogenesis by sequestering 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 proinflammatory 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.

Tissue specificity

Subset of mesodermal cells.

Involvement in disease

Defects in TWIST1 are a cause of Saethre-Chotzen syndrome (SCS) [MIM:101400]; also known as acrocephalosyndactyly type 3 (ACS3). SCS is a craniosynostosis syndrome characterized by coronal synostosis, brachycephaly, low frontal hairline, facial asymmetry, hypertelorism, broad halluces, and clinodactyly.

Defects in TWIST1 are the cause of Robinow-Sorauf syndrome (RSS) [MIM:180750]; also known as craniosynostosis-bifid hallux syndrome. RSS is an autosomal dominant defect characterized by minor skull and limb anomalies which is very similar to Saethre-Chotzen syndrome.

Defects in TWIST1 are the cause of craniosynostosis type 1 (CRS1) [MIM:123100].

Craniosynostosis consists of premature fusion of one or more cranial sutures, resulting in an abnormal head shape.

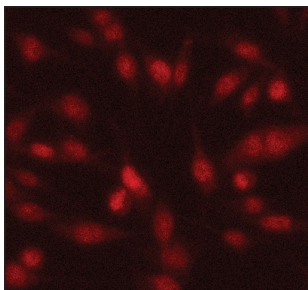
Sequence similarities

Contains 1 basic helix-loop-helix (bHLH) domain.

Cellular localization

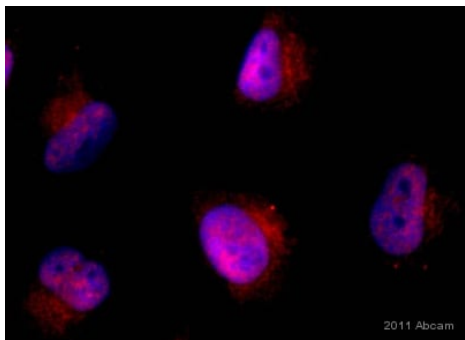
Nucleus.

Images



Human melanoma Mel15 cells were fixed and permeabilized with 4% paraformaldehyde followed by 0.1% Triton X-100. Fixed cells were stained with 2 µg/ml ab50581. The antibody was developed with Goat Anti-Rabbit IgG, Cy3 conjugate.

Immunocytochemistry/ Immunofluorescence - Anti-Twist antibody (ab50581)



Immunocytochemistry/ Immunofluorescence - Anti-Twist antibody (ab50581)

Image courtesy of an anonymous Abreview.

ab50581 staining Twist in human glioblastoma cells by Immunocytochemistry/ Immunofluorescence. The cells were fixed in paraformaldehyde, permeabilised in 0.1% Triton X-100 and then blocked using 0.5% BSA for 20 minutes. Samples were then incubated with primary antibody at 1/50 for 16 hours at 4°C. The secondary antibody used was a goat anti-rabbit IgG conjugated to Cy3® used at a 1/400 dilution.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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