

## Product datasheet

# Anti-Twist2 antibody ab57997

[8 References](#)   [4 Images](#)

### Overview

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|                            |   |
|----------------------------|---|
| <b>Product name</b>        | Anti-Twist2 antibody  |
| <b>Description</b>         | Mouse monoclonal to Twist2  |
| <b>Host species</b>        | Mouse   |
| <b>Tested applications</b> | <b>Suitable for:</b> WB, ICC, IHC-P, ICC/IF, Flow Cyt                               |
| <b>Species reactivity</b>  | <b>Reacts with:</b> Human   |
| <b>Immunogen</b>           | Recombinant full length protein, corresponding to amino acids 1-161 of Human Twist2 |

**Positive control**

[Purchase matching WB positive control:  
Recombinant Human Twist2 protein >](#)

**General notes**

Abcam is committed to meeting high standards of ethical manufacturing and has decided to discontinue this product by July 2018 as it has been generated by the ascites method. We are sorry for any inconvenience this may cause.

### Properties

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|                             |   |
|-----------------------------|---|
| <b>Form</b>                 | Liquid  |
| <b>Storage instructions</b> | Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. |
| <b>Storage buffer</b>       | Preservative: None<br>PBS, pH 7.2   |
| <b>Purity</b>               | Protein G purified  |
| <b>Clonality</b>            | Monoclonal  |
| <b>Isotype</b>              | IgG1  |
| <b>Light chain type</b>     | kappa   |

### Applications

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Our [Abpromise guarantee](#) covers the use of **ab57997** in the following tested applications.

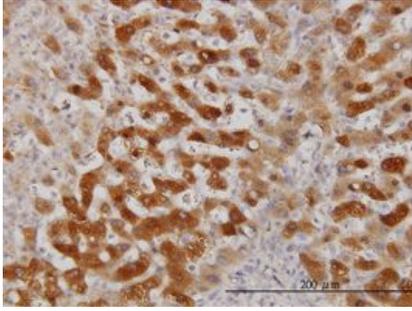
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes  |
|-------------|-----------|--|
| WB          |           | Use a concentration of 1 - 5 µg/ml. This antibody has only been tested in WB against the recombinant fragment used as immunogen. We have no data on the detection of endogenous protein. |
| ICC         |           | Use at an assay dependent concentration. PubMed: 23662124  |
| IHC-P       |           | Use a concentration of 3 µg/ml.  |
| ICC/IF      |           | Use at an assay dependent concentration.   |
| Flow Cyt    |           | Use 1µg for 10 <sup>6</sup> cells.<br><a href="#">ab170190</a> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.                                    |

## Target

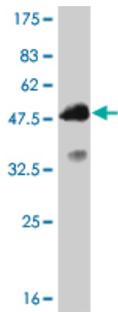
|                               |  |
|-------------------------------|--|
| <b>Function</b>               | Binds to the E-box consensus sequence 5'-CANNTG-3' as a heterodimer and inhibits transcriptional activation by MYOD1, MYOG, MEF2A and MEF2C. Also represses expression of proinflammatory cytokines such as TNFA and IL1B. Involved in postnatal glycogen storage and energy metabolism (By similarity). Inhibits the premature or ectopic differentiation of preosteoblast cells during osteogenesis, possibly by changing the internal signal transduction response of osteoblasts to external growth factors.   |
| <b>Tissue specificity</b>     | In the embryo, highly expressed in chondrogenic cells. In embryonic skin, expressed in the undifferentiated mesenchymal layer beneath the epidermis which later develops into the dermis. Expressed in early myeloid cells but not in lymphoid cells in the liver. Expression also detected in the secretory ependymal epithelium of the choroid plexus primordium. In the adult, expressed in secreting glandular tissues and tubules.  |
| <b>Involvement in disease</b> | Defects in TWIST2 are the cause of Setleis syndrome (SETLEISS) [MIM:227260]. A focal facial dermal dysplasia characterized by distinctive bitemporal scar-like depressions resembling forceps marks, and additional facial features, including a coarse and leonine appearance, absent eyelashes on both lids or multiple rows on the upper lids, absent Meibomian glands, slanted eyebrows, chin clefting, and hypo- or hyperpigmentation of the skin. Histologically, the bitemporal lesion is an ectodermal dysplasia with near absence of subcutaneous fat, suggesting insufficient migration of neural crest cells into the frontonasal process and the first branchial arch. |
| <b>Sequence similarities</b>  | Contains 1 basic helix-loop-helix (bHLH) domain.   |
| <b>Cellular localization</b>  | Nucleus. Cytoplasm. Mainly nuclear during embryonic development. Cytoplasmic in adult tissues.   |

## Images



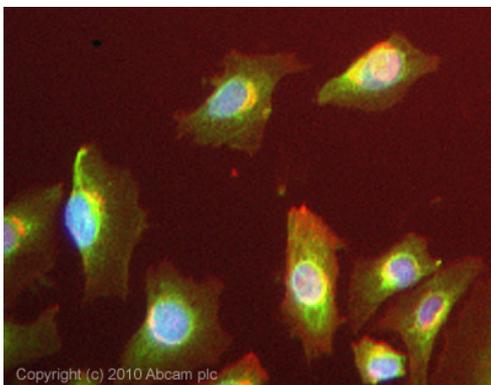
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Twist2 antibody (ab57997)

Twist2 antibody (ab57997) used in immunohistochemistry at 3ug/ml on formalin fixed and paraffin embedded human liver.



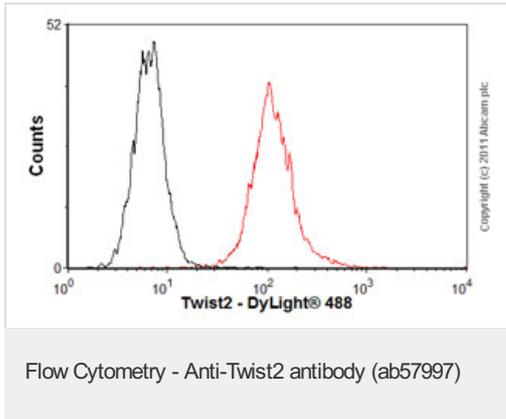
Western blot - Anti-Twist2 antibody (ab57997)

Western blot against GST-tagged recombinant protein immunogen using ab57997 Twist2 antibody at 1ug/ml. Predicted band size of immunogen is 44 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Twist2 antibody (ab57997)

ICC/IF image of ab57997 stained HeLa cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab57997, 10µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Overlay histogram showing HeLa cells stained with ab57997 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab57997, 1µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde/permeabilized in 0.1% PBS-Tween used under the same conditions.

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