



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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# twist (h): 293T Lysate: sc-170453

## BACKGROUND

Members of the myogenic determination family are basic helix-loop-helix (bHLH) proteins that can be separated into two classes. Class A proteins include the ubiquitously expressed E-box binding factors E12/E47, ITF2 and HEB (BETA1 or HTF4). Class B proteins such as MyoD, myogenin and Neuro D (BETA2) are transiently expressed and exhibit a much more limited tissue distribution. Class A proteins heterodimerize with class B proteins to activate DNA transcription. Working in opposition to these positively acting factors are a specialized group of proteins that function as dominant negative regulators. Muscle tissue is derived from a subset of cells originating from the embryonic mesoderm. The novel basic helix-loop-helix (bHLH) transcription factor twist is a putative regulator of mesodermal differentiation and myogenesis. Twist is expressed throughout the epithelial somite but not in the myotome. Twist requires dimerization with the E proteins and inhibits myogenic regulatory factors. It has been implicated as regulator of the temporal and spatial formation of myotomes.

## REFERENCES

1. Lee, J.E., et al. 1995. Conversion of *Xenopus* ectoderm into neurons by Neuro D, a basic helix-loop-helix protein. *Science* 268: 836-844.
2. Naya, F.J., et al. 1995. Tissue-specific regulation of the Insulin gene by a novel basic helix-loop-helix transcription factor. *Genes Dev.* 9: 1009-1019.
3. Vitola, S.J., et al. 1996. Substitution of basic amino acids in the basic region stabilizes DNA binding by E12 homodimers. *Nucleic Acids Res.* 24: 1921-1927.
4. Goldfarb, A.N., et al. 1996. Determinants of helix-loop-helix dimerization affinity. *J. Biol. Chem.* 271: 2683-2688.
5. Ishiguro, A., et al. 1996. Id2 expression increases with differentiation of human myeloid cells. *Blood* 87: 5225-5231.
6. Baylies, M.K., et al. 1996. twist: a myogenic switch in *Drosophila*. *Science* 272: 1481-1484.
7. Spicer, D.B., et al. 1996. Inhibition of myogenic bHLH and MEF-2 transcription factors by the bHLH protein twist. *Science* 272: 1476-1480.
8. Kwok, W.K., et al. 2005. Up-regulation of twist in prostate cancer and its implication as a therapeutic target. *Cancer Res.* 65: 5153-5162.
9. Yuen, H.F., et al. 2007. Significance of twist and E-cadherin expression in the metastatic progression of prostatic cancer. *Histopathology* 50: 648-658.

## CHROMOSOMAL LOCATION

Genetic locus: TWIST1 (human) mapping to 7p21.1.

## PRODUCT

twist (h): 293T Lysate represents a lysate of human twist transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## APPLICATIONS

twist (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive twist antibodies. Recommended use: 10-20 µl per lane.

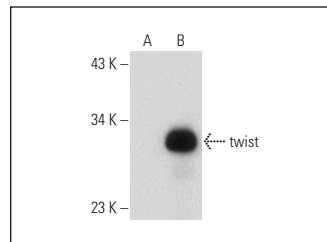
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

twist (Twist2C1a): sc-81417 is recommended as a positive control antibody for Western Blot analysis of enhanced human twist expression in twist transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



twist (Twist2C1a): sc-81417. Western blot analysis of twist expression in non-transfected: sc-117752 (A) and human twist transfected: sc-170453 (B) 293T whole cell lysates.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.