

TWIST1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1774a

Specification

TWIST1 Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | E, WB |
| Primary Accession | Q15672 |
| Reactivity | Human |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | IgG2b |
| Calculated MW | 21kDa KDa |

Description

Basic helix-loop-helix (bHLH) transcription factors have been implicated in cell lineage determination and differentiation. The protein encoded by this gene is a bHLH transcription factor and shares similarity with another bHLH transcription factor, Dermo1. The strongest expression of this mRNA is in placental tissue; in adults, mesodermally derived tissues express this mRNA preferentially. Mutations in this gene have been found in patients with Saethre-Chotzen syndrome.

Immunogen

Purified recombinant fragment of human TWIST1 (AA: 9-74) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

TWIST1 Antibody - Additional Information

Gene ID 7291

Other Names

Twist-related protein 1, Class A basic helix-loop-helix protein 38, bHLHa38, H-twist, TWIST1, BHLHA38, TWIST

Dilution

E~~1/10000
WB~~1/500 - 1/2000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TWIST1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TWIST1 Antibody - Protein Information

Name TWIST1

Synonyms BHLHA38, TWIST

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 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).

Cellular Location

Nucleus.

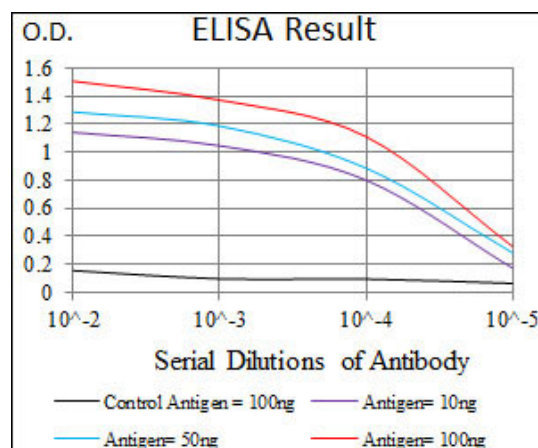
Tissue Location

Subset of mesodermal cells.

TWIST1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



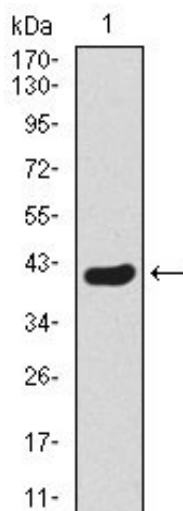


Figure 1: Western blot analysis using TWIST1 mAb against human TWIST1 recombinant protein. (Expected MW is 40 kDa)

TWIST1 Antibody - References

1. J Cancer Res Clin Oncol. 2011 Oct;137(10):1487-93.
2. Cancer Res. 2011 Jan 1;71(1):245-54.