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Anti-TWIST Antibody

Catalog # AP51996

Product Information

Application	WB, IF/IC
Primary Accession	Q15672
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	20954

Additional Information

Gene ID	7291
Other Names	BHLHA38; TWIST; Twist-related protein 1; Class A basic helix-loop-helix protein 38; bHLHa38; H-twist
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human TWIST. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

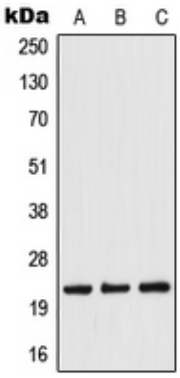
Name	TWIST1
Synonyms	BHLHA38, TWIST
Function	Acts as a transcriptional regulator. Inhibits myogenesis by sequestrating E proteins, inhibiting trans-activation by MEF2, and inhibiting DNA-binding by MYOD1 through physical interaction. This interaction probably involves the basic domains of both proteins. 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.

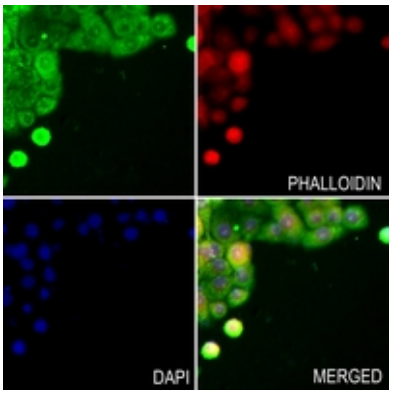
References

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Howard T.D.,et al.Nat. Genet. 15:36-41(1997).
Krebs I.,et al.Hum. Mol. Genet. 6:1079-1086(1997).
Hillier L.W.,et al.Nature 424:157-164(2003).

Images



Western blot analysis of TWIST expression in Jurkat (A), Raw264.7 (B), rat liver (C) whole cell lysates. (Predicted band size: 20 kD; Observed band size: 25 kD)



Immunofluorescent analysis of TWIST staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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