

# TWIST Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51996

## Product Information

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Application	WB
Primary Accession	<a href="#">Q15672</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	20954

## Additional Information

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Gene ID	7291
Other Names	Twist-related protein 1, Class A basic helix-loop-helix protein 38, bHLHa38, H-twist, TWIST1, BHLHA38, TWIST
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

## Protein Information

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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.

## Background

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## References

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- Wang S.M.,et al.Gene 187:83-92(1997).  
Bourgeois P.,et al.Mamm. Genome 7:915-917(1996).  
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).

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