ARG67154
anti-Twist 1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Twist 1
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Twist 1
Species	Human
Immunogen	Synthetic peptide correspond to N-terminal region of human TWIST1.
Conjugation	Un-conjugated
Alternate Names	TWIST1; Twist Family BHLH Transcription Factor 1; H-Twist; BHLHa38; BPES2; TWIST; CRS1; SCS; Twist Basic Helix-Loop-Helix Transcription Factor 1; Class A Basic Helix-Loop-Helix Protein 38; Twist-Related Protein 1; BPES3; ACS3; CRS; Blepharophimosis, Epicanthus Inversus And Ptosis 3; Twist Homolog 1 (Drosophila); TWIST Homolog Of Drosophila; B-HLH DNA Binding Protein; Saethre-Chotzen Syndrome; Acrocephalosyndactyly 3; Craniosynostosis; Twist Homolog 1; BHLHA38; SWCOS; CSO

Application Instructions

Application table

Application	Dilution
ICC/IF	1:50 - 1:200
WB	1:500 - 1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

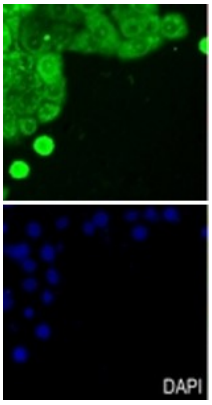
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.42% Potassium phosphate (pH 7.3), 0.87% NaCl, 0.01% Sodium azide and 30% Glycerol.
Preservative	0.01% Sodium azide
Stabilizer	30% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

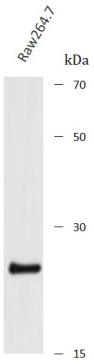
Gene Symbol	TWIST1
Gene Full Name	Twist Family BHLH Transcription Factor 1
Background	This gene encodes a basic helix-loop-helix (bHLH) transcription factor that plays an important role in embryonic development. The encoded protein forms both homodimers and heterodimers that bind to DNA E box sequences and regulate the transcription of genes involved in cranial suture closure during skull development. This protein may also regulate neural tube closure, limb development and brown fat metabolism. This gene is hypermethylated and overexpressed in multiple human cancers, and the encoded protein promotes tumor cell invasion and metastasis, as well as metastatic recurrence. Mutations in this gene cause Saethre-Chotzen syndrome in human patients, which is characterized by craniosynostosis, ptosis and hypertelorism. [provided by RefSeq, Jul 2020]
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. [Uniprot]
Calculated Mw	21 kDa
Cellular Localization	Nucleus. [Uniprot]

Images



ARG67154 anti-Twist 1 antibody ICC/IF image

Immunofluorescence: Hela stained with ARG67154 anti-Twist 1 antibody.



ARG67154 anti-Twist 1 antibody WB image

Western blot: Raw264.7 stained with ARG67154 anti-Twist 1 antibody at dilution.