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Twist2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58127

Specification

Twist2 Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, E**
Primary Accession	Q8WVJ9
Reactivity	**Rat, Pig, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**18 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human Twist2**
Epitope Specificity	**75-160/160**
Isotype	**IgG**
Purity affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Nucleus. Cytoplasm. Note=Mainly nuclear during embryonic development. Cytoplasmic in adult tissues.**
SIMILARITY	**Contains 1 basic helix-loop-helix (bHLH) domain.**
SUBUNIT	**Efficient DNA binding requires dimerization with another bHLH protein. Forms a heterodimer with TCF3/E12. Also interacts with MEF2C (By similarity).**
DISEASE	**Focal facial dermal dysplasia 3, Setleis type (FFDD3) [MIM:227260]: A form of focal facial dermal dysplasia, a group of developmental defects characterized by bitemporal or preauricular skin lesions resembling aplasia cutis congenita. FFDD3 is characterized by distinctive bitemporal scar-like depressions resembling forceps marks, and additional facial features, including a coarse and leonine appearance, absent eyelashes on both lids or multiple rows on the upper lids, absent Meibomian glands, slanted eyebrows, chin clefting, and hypo- or hyperpigmentation of the skin. Histologically, the bitemporal lesion is an ectodermal dysplasia with near absence of subcutaneous fat, suggesting insufficient migration of neural crest cells into the frontonasal process and the first branchial arch. Note=The disease is caused**

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Important Note

by mutations affecting the gene represented in this entry.
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions
Twist2 (Twist homolog 2) is a basic helix-loop-helix (bHLH) transcription factor which acts as a transcriptional repressor. It binds to the E-box consensus sequence 5'-CANNTG-3' and inhibits transcriptional activation by MYOD1, MYOG, MEF2A and MEF2C. Efficient DNA binding requires dimerization with another bHLH protein. Twist2 inhibits the premature or ectopic differentiation of preosteoblast cells during osteogenesis.

Twist2 Polyclonal Antibody - Additional Information

Gene ID 117581

Other Names
Twist-related protein 2, Class A basic helix-loop-helix protein 39, bHLHa39, Dermis-expressed protein 1, Dermo-1, TWIST2, BHLHA39, DERMO1

Target/Specificity
In the embryo, highly expressed in chondrogenic cells. In embryonic skin, expressed in the undifferentiated mesenchymal layer beneath the epidermis which later develops into the dermis. Expressed in early myeloid cells but not in lymphoid cells in the liver. Expression also detected in the secretory ependymal epithelium of the choroid plexus primordium. In the adult, expressed in secreting glandular tissues and tubules.

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

Twist2 Polyclonal Antibody - Protein Information

Name TWIST2

Synonyms BHLHA39, DERMO1

Function
Binds to the E-box consensus sequence 5'-CANNTG-3' as a heterodimer and inhibits transcriptional activation by MYOD1, MYOG, MEF2A and MEF2C. Also represses expression of pro-inflammatory cytokines such as TNFA and IL1B. Involved in postnatal glycogen storage and energy metabolism (By similarity). Inhibits the premature or ectopic differentiation of preosteoblast cells during osteogenesis, possibly by changing the internal signal transduction response of osteoblasts to external growth factors.

Cellular Location
Nucleus {ECO:0000255|PROSITE-ProRule:PRU00981, ECO:0000269|PubMed:11062344}. Cytoplasm Note=Mainly nuclear during embryonic development. Cytoplasmic in adult tissues

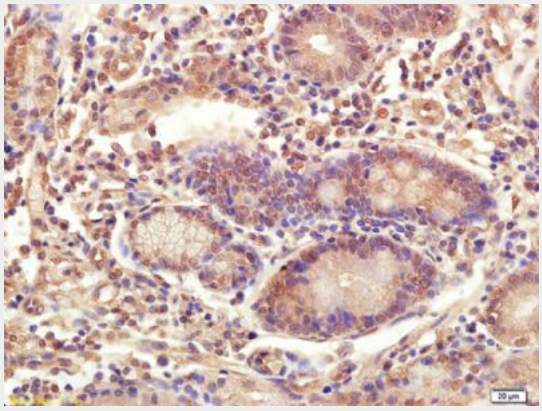
Tissue Location
In the embryo, highly expressed in chondrogenic cells. In embryonic skin, expressed in the undifferentiated mesenchymal layer beneath the epidermis which later develops into the dermis Expressed in early myeloid cells but not in lymphoid cells in the liver. Expression also detected in the secretory ependymal epithelium of the choroid plexus primordium. In the adult, expressed in secreting glandular tissues and tubules.

Twist2 Polyclonal 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 Cytomety
- Cell Culture

Twist2 Polyclonal Antibody - Images



Tissue/cell: human colon carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-Twist2 Polyclonal Antibody, Unconjugated(bs-4173R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining