



Rabbit Anti-Twist2 antibody

SL4173R

Product Name:	Twist2
Chinese Name:	TWIST蛋白2抗体抗体
Alias:	bHLHa39; Class A basic helix-loop-helix protein 39; Dermis expressed protein 1; Dermis-expressed protein 1; DERMO 1; Dermo-1; DERMO1; MGC117334; Twist 2; Twist homolog 2 (Drosophila); Twist homolog 2; Twist related bHLH protein Dermo1; Twist related protein 2; Twist-related protein 2; Twist2; TWST2 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,Horse,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	18kDa
Cellular localization:	The nucleocytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Twist2:75-160/160
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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 °C.
PubMed:	PubMed
Product Detail:	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.

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 proinflammatory 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.

Subunit:

Efficient DNA binding requires dimerization with another bHLH protein. Forms a heterodimer with TCF3/E12. Also interacts with MEF2C (By similarity).

Subcellular Location:

Nucleus. Cytoplasm. Note=Mainly nuclear during embryonic development. Cytoplasmic in adult tissues.

Tissue 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.

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 by mutations affecting the gene represented in this entry.

Similarity:

Contains 1 basic helix-loop-helix (bHLH) domain.

SWISS:

Q8WVJ9

Gene ID:

117581

Database links:

[Entrez Gene: 117581](#)Human

[Entrez Gene: 13345](#)Mouse

[Entrez Gene: 59327](#)Rat

[Omim: 607556](#)Human

[SwissProt: Q8WVJ9](#)Human

[SwissProt: Q9D030](#)Mouse

[SwissProt: P97831](#)Rat

[Unigene: 422585](#)Human

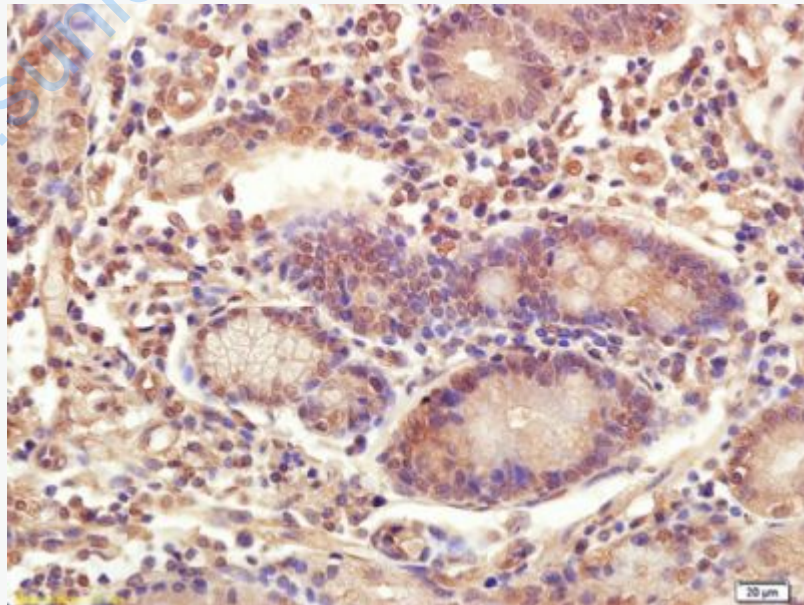
[Unigene: 9474](#)Mouse

[Unigene: 16279](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



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°C for 20 min;

Incubation: Anti-Twist2 Polyclonal Antibody, Unconjugated(SL4173R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining