

Product Specification Sheet

**Twist-related Protein 2 (Twist2; Dermo-1) Antibodies**

<b>Cat #</b> TWST21-P	Mouse Twist2 Control/Blocking Peptide	<b>SIZE:</b> 100 µg
<b>Cat #</b> TWST21-A	Rabbit anti- mouse Twist2 IgG (affinity pure)	<b>SIZE:</b> 100 µg

**Basic helix-loop-helix (bHLH)** transcription factors have been implicated in cell lineage determination and differentiation. The protein encoded by Twist gene is a bHLH transcription factor and shares similarity with another bHLH transcription factor, Twist. It is thought that during osteoblast development this protein may inhibit osteoblast maturation and maintain cells in a preosteoblast phenotype.

**Twist and Dermo1**, also called Twist1 and Twist2 respectively, were induced by a cytokine signaling pathway that required the dorsal-related protein RelA, a member of the nuclear factor kappa-B family of transcription factors, in mice. Twist1 and Twist2 repressed cytokine gene expression through interaction with RelA. TWIST proteins regulate cytokine signaling by establishing a negative feedback loop that represses the NFκB-dependent cytokine pathway.

**TWIST2:** rat, mouse, human: 160 aa each – 18.1 kDa; Human chromosome: 2q37.3. Protein homology between mouse, rat and human Twist2 is 99%. Twist2 expression is restricted to dermis and perichondrium.

**Source of Antigen, Antibodies**

<b>Antigen</b>	20- aa peptide of Mouse Twist2 (Protein accession # <a href="#">Q9D030</a> ; ref. 1); designated as TFF11-P control/blocking peptide conjugated to KLH; epitope location ~ N-terminus
<b>Antibody host/type</b>	Rabbit, Polyclonal IgG (Cat # TWST21-A), purified over antigen-Agarose
<b>Secondary Ab</b>	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available).
<b>Negative Control Ab</b>	Non-immune rabbit IgG (Cat # 20009-1) to be used as –ve control for ELISA, WB, IHC etc.

**Form & Storage of Antibodies/Peptide Control**

**Affinity pure IgG**

100 ug/100ul solution lyophilized powder  
Supplied in **Buffer:** PBS+0.1% BSA  
**Reconstitute powder** in PBS at 1mg/ml

**Control/blocking peptide**

100 ug/100 ul solution lyophilized powder  
Supplied in Buffer: PBS pH 7.5,  
**Reconstitute powder** in PBS at 1 mg/ml.

**Storage**

**Short-term:** unopened, undiluted vials for less than a week at 4°C.

**Long-term:** at –20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at –20°C or below.

**Shipping:** 4°C for solutions and room temp for powder.

**Recommended Usage**

**Western Blotting:** 1-10 µg/ml; using affinity pure antibody (chemiluminescence technique).

**ELISA:** 1:100K; using 50-100 ng control peptide/well.

**Histochemistry & Immunofluorescence:** Not tested; we recommend the use of affinity purified antibody at 2-10 µg/ml.

**Specificity & Cross-reactivity**

Mouse TWST21-P peptide sequence is 100% homologous to rat with no identities to human TWST2 protein. Antibody cross-reactivity in various species is not known. The control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol at the web site).

**General References:**

- (1) Li L., et al., (1995) Dev. Biol. 172:280-292.

**List of related items, data sheets, and publications, using ADI antibodies is posted on the web site**

\*This product is for in vitro research use only.

TWST21-A-P

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