**Twist1 Antibody**

**Cat.#:** AF4009  
**Concn.:** 1mg/ml  
**Mol.Wt.:** 29 kd

**Size:** 50ul,100ul,200ul  
**Source:** Rabbit  
**Clonality:** Polyclonal

**Application:** WB 1:500-1:2000, IHC 1:50-1:200, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000

**Reactivity:** Human, Mouse, Rat

**Purification:** The antiserum was purified by peptide affinity chromatography using SulfoLink™ Coupling Resin (Thermo Fisher Scientific).

**Specificity:** Twist1 Antibody detects endogenous levels of total Twist1.

**Immunogen:** A synthesized peptide derived from human Twist1, corresponding to a region within N-terminal amino acids.

**Uniprot:** Q15672

**Description:** 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 proinflammatory 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.

**Storage Condition and Buffer:** Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at -20 °C. Stable for 12 months from date of receipt.

Western blot analysis of extracts from JK, Raji and HL-60 cells using Twist1 Antibody
AF4009 at 1/100 staining Human normal tissues adjacent to colorectal cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4°C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

Immunohistochemical staining for Twist1 in representative tissue samples. (A) Low nuclear expression in the BM biopsy specimens of MM patients without skeletal EMD. (B) Low nuclear expression in the BM biopsy specimens of MM patients with skeletal EMD. (C) High nuclear expression in skeletal EMD of MM patients. Original magnification ×400. (1-3)

AF4009 staining 293T by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

**IMPORTANT:** For western blot, incubate membrane with diluted primary Ab in 5% w/v milk, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.