



**Polyclonal Anti- Core binding factor alpha1, CBFA1 (Sepharose Bead Conjugate)**

**Catalogue No.** PA1224-S

**Lot No.** 0121112042449

**Ig type:** rabbit IgG

**Size:** 100µg/vial

**Specificity**

Human, rat. No cross reactivity with other proteins.

**Recommended application**

(Immunoprecipitation(IP))

**Immunogen**

A synthetic peptide corresponding to a sequence at the middle region of human CBFA1 (244-258 aa), identical to the related rat and mouse sequence.

**Purification**

Immunogen affinity purified.

**Formulation**

50% slurry in PBS pH 7.2  
with 0.01mg NaN<sub>3</sub>a<sub>3</sub> preservative.

**Storage**

Store at 4°C for frequent use.

**Description:**

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

**BACKGROUND**

Core binding factor A1 (CBFA1/RUNX2) is a runt-like transcription factor essential for osteoblast differentiation.<sup>1</sup> This protein is a member of the RUNX family of transcription factors and has a Runt DNA-binding domain. It is essential for osteoblastic differentiation and skeletal morphogenesis and acts as a scaffold for nucleic acids and regulatory factors involved in skeletal gene expression. D'Souza et al. (1999) indicate a non-redundant role for Cbfa1 in tooth development that may be distinct from that in bone formation. In odontogenesis, Cbfa1 is not involved in the early signaling networks regulating tooth initiation and early morphogenesis but regulates key epithelial-mesenchymal interactions that control advancing morphogenesis and histodifferentiation of the epithelial enamel organ.<sup>2</sup>

**REFERENCE**

1. Bergwitz, C.; Prochnau, A.; Mayr, B.; Kramer, F.-J.; Rittierdt, M.; Berken, H.-L.; Hausamen, J.-E.; Brabant, G. : Identification of novel CBFA1/RUNX2 mutations causing cleidocranial dysplasia. *J. Inherit. Metab. Dis.* 24: 648-656, 2001.
2. D'Souza, R. N.; Aberg, T.; Gaikwad, J.; Cavender, A.; Owen, M.; Karsenty, G.; Thesleff, I. : Cbfa1 is required for epithelial-mesenchymal interactions regulating tooth development in mice. *Development* 126: 2911-2920, 1999.

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