



Product Informatiion Sheet

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

Catalogue No. PA1224-M 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.

Ig type: rabbit IgG1 Purification

Immunogen affinity purified

Size: 100µg/Vial

Lot No. 0121112042449

Contents

Specificity Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN₃.

Human, rat.

No cross reactivity with other Storage

proteins. Store at 4°C for frequent use.

Recommended application Description:

Immunoprecipitation(IP) This Antagene antibody is immobilized by the covalent reaction of

hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads.

It is useful for immunoprecipitation

BACKGROUND

Core binding factor A1 (CBFA1/RUNX2) is a runt-like transcription factor essential for osteoblast differentiation. 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. ²

REFERENCE

- 1. Bergwitz, C.; Prochnau, A.; Mayr, B.; Kramer, F.-J.; Rittierodt, M.; Berten, 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.