

DESCRIPTION

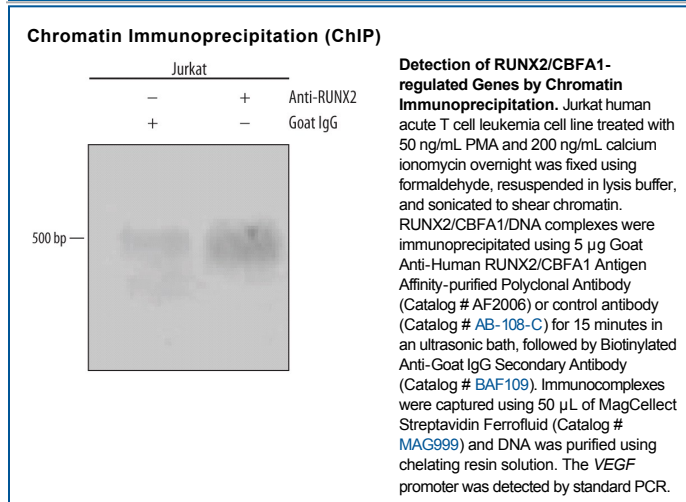
Species Reactivity	Human
Specificity	Detects human RUNX2/CBFA1 in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human (rh) RUNX1 and rhRUNX3 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human RUNX2/CBFA1 isoform 2 Lys219-Tyr404 Accession # Q13950
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human RUNX2/CBFA1
Chromatin Immunoprecipitation (ChIP)	5 µg/5 x 10 ⁶ cells	See Below
Immunocytochemistry	5-15 µg/mL	Immersion fixed MC3T3-E1 mouse preosteoblast cell line

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Core Binding Factor A1 (CBFA1; also called AML-3, PEBP-2αA, OSF-2, RUNX2) is a 56 kDa DNA-binding protein that belongs to the Runt-related family of transcription factors. It is synthesized as a 521 amino acid (aa) protein with multiple domains. From the N-terminus, there is a 19 aa activation domain (AD1), a 41 aa glutamine/alanine (Q/A) repeat segment (AD2), a 128 aa Runt/DNA-binding region, a 9 aa NLS and a 285 aa ProSerThr (PST)-rich sequence that is needed for gene activation. Two isoforms exist, one with a truncated AD1 domain and another with a 22 aa deletion in the AD3 section of PST-rich sequence. Human CBFA1 is 98% aa identical to mouse CBFA1.