

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human RUNX2/CBFA1.
Source	Monoclonal Rat IgG _{2B} Clone # 232902
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human RUNX2/CBFA1 isoform 2 Lys233-Tyr418 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.

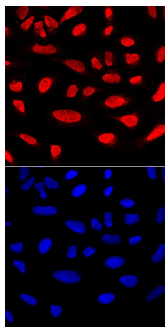
APPLICATIONS

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
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



RUNX2/CBFA1 in U2OS Human Cell Line. RUNX2/CBFA1 was detected in immersion fixed U2OS human osteosarcoma cell line using Rat Anti-Human RUNX2/CBFA1 Monoclonal Antibody (Catalog # MAB2006) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red, upper panel; Catalog # NL013) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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

CBFA1, also called runt-related transcription factor 2 (RUNX2), is an essential transcription factor for the regulation of osteoblast differentiation (1). The CBFA1 gene potentially encodes several proteins that differ in their N-terminal sequences and transactivation capacities (2).

References:

1. Ducey, P. *et al.* (1997) *Cell* **89**:747.
2. Xiao, Z.S. *et al.* (1998) *Gene* **214**:187.
3. Sato, M. *et al.* (1998) *Oncogene* **17**:1517.