

DESCRIPTION

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|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human HOXB7 in ELISAs. |
| Source | Monoclonal Mouse IgG ₁ Clone # 864614 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | <i>E. coli</i> -derived recombinant human HOXB7 Met1-Asn123 Accession # P09629 |
| 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. |

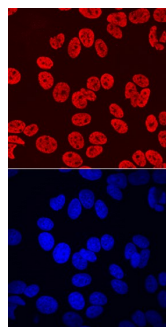
APPLICATIONS

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



HOXB7 in MCF-7 Human Cell Line. HOXB7 was detected in immersion fixed MCF-7 human breast cancer cell line using Mouse Anti-Human HOXB7 Monoclonal Antibody (Catalog # MAB8040) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) 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

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|--------------------------------|--|
| Reconstitution | Sterile PBS to a final concentration of 0.5 mg/mL. |
| 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

HOXB7 (Homeobox protein B7), also called Hox-2C, is a 24 kDa (predicted) member of the Antp homeobox family of transcription factors. It is widely expressed and is overexpressed in many cancers such as melanoma and tumors in lung and breast. It promotes tumorigenesis by promoting activities such as proliferation, invasion, epithelial-mesenchymal transition and angiogenesis. Human HOXB7 is a 217 amino acid (aa) protein with an Antp-type hexapeptide (aa 126-131) that mediates heterodimerization, and a DNA-binding homeobox domain (aa 137-196). Human HOXB7 aa 1-123 shares 92% aa sequence identity with mouse and rat HOXB7.