

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TBX2 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) TBX3, rhTBX6, or rhT-bet is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 393720
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human TBX2 Thr593-Arg702 Accession # Q13207
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.

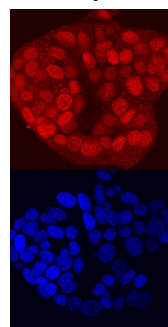
APPLICATIONS

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



TBX2 in MCF-7 Human Cell Line. TBX2 was detected in immersion fixed MCF-7 human breast cancer cell line using Rat Anti-Human TBX2 Monoclonal Antibody (Catalog # MAB50401) 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

T-box protein 2 (TBX2) is a member of the T-box family of transcription factors and functions in the transcriptional regulation of genes required for mesoderm differentiation and limb bud pattern formation. The 74 kDa (predicted MW) nuclear protein, like other T-box family members, contains a T-domain which is involved in DNA binding and dimerization of the protein (aa 99-277). Human TBX2 shows 96%, 95%, and 71% amino acid identity with dog, mouse, and *Xenopus tropicalis* TBX2, respectively.