

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse GATA-3 in Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 634913
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human GATA-3 Pro135-Ser258 Accession # P23771
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.

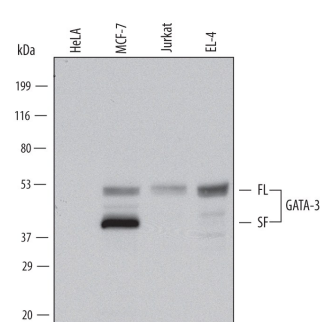
APPLICATIONS

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	See Below
Immunocytochemistry	3-25 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below
Simple Western	10 µg/mL	See Below

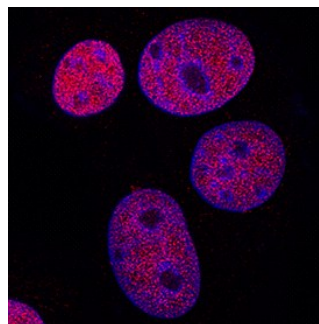
DATA

Western Blot



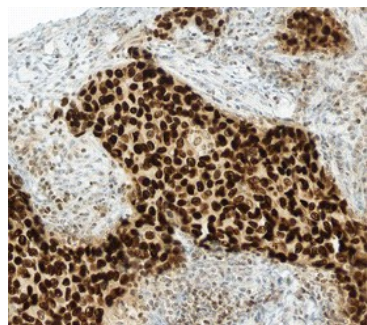
Detection of Human and Mouse GATA-3 by Western Blot. Western blot shows lysates of HeLa human cervical epithelial carcinoma cell line, MCF-7 human breast cancer cell line, Jurkat human acute T cell leukemia cell line, and EL-4 mouse lymphoblast cell line. PVDF Membrane was probed with 0.1 µg/mL of Mouse Anti-Human/Mouse GATA-3 Monoclonal Antibody (Catalog # MAB6330) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). Specific bands were detected for full length (FL) GATA-3 at approximately 52 kDa and the splice form (SF) found in MCF-7 cells at approximately 40 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



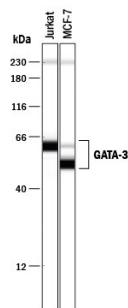
GATA-3 in MCF-7 Human Cell Line. GATA-3 was detected in immersion fixed MCF-7 human breast cancer cell line using Mouse Anti-Human/Mouse GATA-3 Monoclonal Antibody (Catalog # MAB6330) at 3 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



GATA-3 in Human Breast Cancer Tissue. GATA-3 was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Mouse Anti-Human/Mouse GATA-3 Monoclonal Antibody (Catalog # MAB6330) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Simple Western



Detection of Human GATA-3 by Simple Western™. Simple Western lane view shows lysates of Jurkat human acute T cell leukemia cell line and MCF-7 human breast cancer cell line, loaded at 0.5 mg/mL. Specific bands were detected for GATA-3 at approximately 53 (splice variant) and 61 kDa (full length) as indicated, using 10 µg/mL of Mouse Anti-Human/Mouse GATA-3 Monoclonal Antibody (Catalog # MAB6330). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody.



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

GATA-3 belongs to the GATA family of transcription factors, which bind to the consensus DNA sequence (A/T) GATA (A/G) to control diverse tissue-specific programs of gene expression and morphogenesis. It is widely expressed in mesodermal- and endodermal-derived tissues. GATA-3 has been shown to be an essential regulator for immune cell function, sympathetic neuron development and the maintenance of the differentiated state in epithelial cells.