

DESCRIPTION	
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human and mouse GATA-3 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human GATA-3 Pro135-Ser258 Accession # P23771
<b>Formulation</b>	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
<b>Western Blot</b>	0.25 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>Simple Western</b>	2.5 µg/mL	See Below

**DATA**

**Western Blot**

**Detection of Human and Mouse GATA-3 by Western Blot.** Western blot shows lysates of 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 0.25 µg/mL of Goat Anti-Human GATA-3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2605) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). Specific bands were detected for GATA-3 full length (FL) at approximately 55 kDa and the splice form (SF) 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 10 µg/mL Goat Anti-Human GATA-3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2605) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red, upper panel; Catalog # NL001) and counterstained with DAPI (blue, lower panel). View our protocol for *Fluorescent ICC Staining of Cells on Coverslips*.

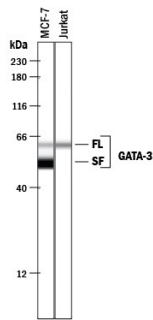
**Immunohistochemistry**

**GATA-3 in Human Breast Cancer Tissue.** GATA-3 was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Goat Anti-Human GATA-3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2605) at 3 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-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for *Chromogenic IHC Staining of Paraffin-embedded Tissue Sections*.

**Immunohistochemistry**

**GATA-3 in Human Breast Cancer Tissue.** GATA-3 was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Goat Anti-Human GATA-3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2605) at 3 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-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). 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 MCF-7 human breast cancer cell line and Jurkat human acute T cell leukemia cell line, loaded at 0.2 mg/mL. Specific bands were detected for GATA-3 full length (FL) at approximately 62 kDa and the splice form (SF) at approximately 52 kDa (as indicated) using 2.5 µg/mL of Goat Anti-Human GATA-3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2605) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**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.