

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects human and mouse GATA-2 in 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-2 Ala15-Thr279 Accession # P23769
<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 either lyophilized or as a 0.2 µm filtered solution in PBS.

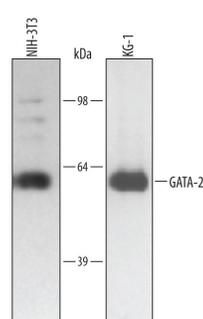
## APPLICATIONS

**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>	0.5 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	Immersion fixed HUVEC human umbilical vein endothelial cells and SH-SY5Y human neuroblastoma cell line
<b>Immunohistochemistry</b>	1-15 µg/mL	See Below
<b>Simple Western</b>	5 µg/mL	See Below

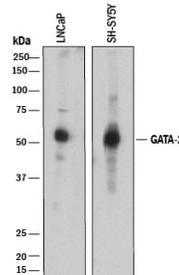
## DATA

### Western Blot



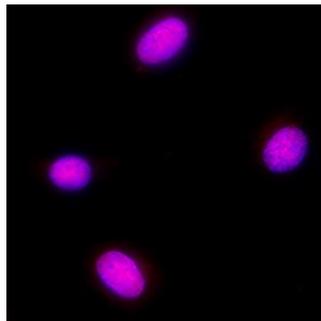
**Detection of Human GATA-2 by Western Blot.** Western blot shows lysates of NIH-3T3 mouse embryonic fibroblast cell line and KG-1 human acute myelogenous leukemia cell line. PVDF membrane was probed with 0.5 µg/mL of Human/Mouse GATA-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2046) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for GATA-2 at approximately 51 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Western Blot



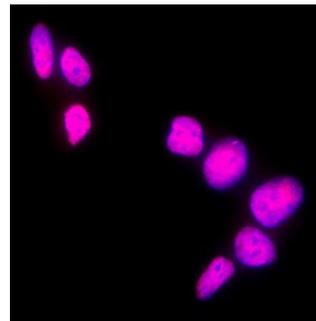
**Detection of Human GATA-2 by Western Blot.** Western blot shows lysates of LNCaP human prostate cancer cell line and SH-SY5Y human neuroblastoma cell line. PVDF membrane was probed with 0.5 µg/mL of Goat Anti-Human/Mouse GATA-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2046) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for GATA-2 at approximately 55 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Immunocytochemistry



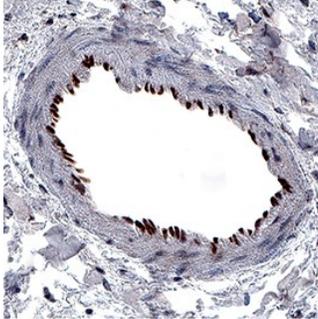
**GATA-2 in HUVEC Human Cells.** GATA-2 was detected in immersion fixed HUVEC human umbilical vein endothelial cells using Goat Anti-Human/Mouse GATA-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2046) at 5 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cell nuclei. Staining was performed using our protocol for Fluorescent ICC Staining of Non-adherent Cells.

### Immunocytochemistry



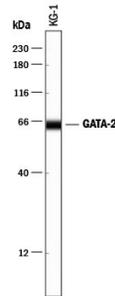
**GATA-2 in SH-SY5Y Human Cell Line.** GATA-2 was detected in immersion fixed SH-SY5Y human neuroblastoma cell line using Goat Anti-Human/Mouse GATA-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2046) at 5 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cell nuclei. Staining was performed using our protocol for Fluorescent ICC Staining of Non-adherent Cells.

## Immunohistochemistry



**GATA-2 in Human Duodenum.** GATA-2 was detected in immersion fixed paraffin-embedded sections of human duodenum (blood vessel) using Goat Anti-Human/Mouse GATA-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2046) at 1 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Goat IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC004). 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 DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei in endothelial cells. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

## Simple Western



**Detection of Human GATA-2 by Simple Western™.** Simple Western lane view shows lysates of KG-1 human acute myelogenous leukemia cell line, loaded at 0.2 mg/mL. A specific band was detected for GATA-2 at approximately 64 kDa (as indicated) using 5 µg/mL of Goat Anti-Human GATA-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2046) 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>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <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 factors constitute a family of transcriptional regulatory factors that bind to the consensus DNA sequence (A/T) GATA (A/G) to control diverse tissue-specific programs of gene expression and morphogenesis. GATA-1/2/3 are each expressed in the hematopoietic system while GATA 4/5/6 are each expressed in the developing heart and in gastrointestinal and gut-derived tissues (1, 2).

### References:

1. Tsai, S.F. *et al.* (1989) *Nature* **339**:446.
2. Jiang, Y. and T. Evans (1996) *Dev. Biol.* **174**:258.