

DESCRIPTION

Species Reactivity	Human/Mouse
Specificity	Detects human and mouse GATA-2 in Western blots. In direct ELISAs and Western blots, this antibody shows less than 1% cross-reactivity with rhGATA-1, rhGATA-5 and rhGATA-6.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human GATA-2 Ala15-Thr279 Accession # P23769
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

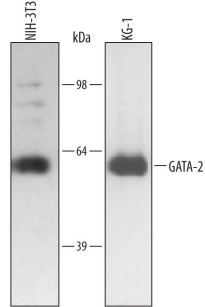
APPLICATIONS

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
Western Blot	0.5 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	Immersion fixed human umbilical vein endothelial cells
Immunohistochemistry	1-15 µg/mL	See Below
Simple Western	5 µg/mL	See Below

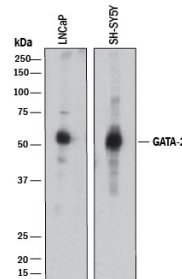
DATA

Western Blot



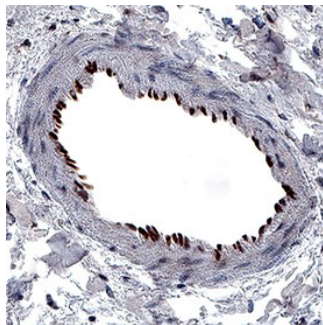
Detection of Human GATA-2 by Western Blot. Western blot shows lysates of NIH-3T3 mouse embryonic fibroblast cell line and KG-1 human acute myelogenous leukemia cell line. PVDF membrane was probed with 0.5 µg/mL of Human/Mouse GATA-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2046) followed 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



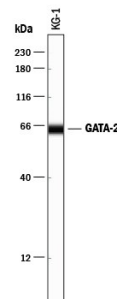
Detection of Human GATA-2 by Western Blot. Western blot shows lysates of LNCaP human prostate cancer cell line and SH-SY5Y human neuroblastoma cell line. PVDF membrane was probed with 0.5 µg/mL of Goat Anti-Human/Mouse GATA-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2046) followed by 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](#).

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

Reconstitution	Reconstitute at 0.2 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 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.