

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human GATA-6 in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human GATA-5 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human GATA-6 Met1-Thr449 Accession # Q92908
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	1 µg/mL	See Below
Chromatin Immunoprecipitation (ChIP)	5 µg/5 x 10 ⁶ cells	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Western Blot

Detection of Human GATA-6 by Western Blot. Western blot shows cytoplasmic and nuclear extracts from PC-3 human prostate cancer cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human GATA-6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1700) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for GATA-6 at approximately 55 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Chromatin Immunoprecipitation (ChIP)

Detection of GATA-6-regulated Genes by Chromatin Immunoprecipitation. KATO-III human gastric carcinoma cell line was fixed using formaldehyde, resuspended in lysis buffer, and sonicated to shear chromatin. GATA-6/DNA complexes were immunoprecipitated using 5 µg Goat Anti-Human GATA-6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1700) or control antibody (Catalog # AB-108-C) for 15 minutes in an ultrasonic bath, followed by Biotinylated Anti-Goat IgG Secondary Antibody (Catalog # BAF109). Immunocomplexes were captured using 50 µL of MagCollect Streptavidin Ferrofluid (Catalog # MAG999) and DNA was purified using chelating resin solution. The *mucin4* promoter was detected by standard PCR.

Immunocytochemistry

GATA-6 in KATO-III Human Cell Line. GATA-6 was detected in immersion fixed KATO-III human gastric carcinoma cell line using 10 µg/mL Goat Anti-Human GATA-6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1700) 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-6 in Human Intestine. GATA-6 was detected in immersion fixed paraffin-embedded sections of human intestine using Goat Anti-Human GATA-6 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1700) at 5 µg/mL overnight at 4 °C. 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](#).

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-6 (also named GATA-GT1) is a zinc finger transcription activating protein that binds to a T/A-G-A-T-A-G/A DNA sequence motif in mesodermally and endodermally-derived tissue. There are two GATA-6 isoforms that arise from alternate start sites: a short form of 449 amino acids (aa), and a long form of 595 aa. The short form of human GATA-6 is 93%, 92% and 88% aa identical to GATA-6 in porcine, rat and mouse, respectively.