Anti-Phospho-GATA3 (S308) Antibody [ST44-09] ET1609-17

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IP, IF-Tissue
Molecular Wt:	Predicted band size: 48 kDa
Clone number:	ST44-09

Description: GATA-3 antibody (GATA binding protein 3) is a member of the GATA family of transcription factors. GATA-3 appears to control a set of genes involved in the differentiation and proliferation of breast cancer. The expression of GATA-3 has a strong association with estrogen receptor-alpha expression in breast cancer and evidence exists that GATA-3 may be used to predict response to hormonal therapy of breast cancer patients. GATA-3 has also been shown to be a novel marker for bladder cancer. In one study, GATA-3 stained 67% of 308 urothelial carcinomas but no prostate or renal carcinomas.

Immunogen: Synthetic phospho-peptide corresponding to residues surrounding Ser308 of Human GATA3 aa 281-330 / 443.

Positive control: Jurkat cell lysate, human skin tissue lysate, human stomach tissue, mouse stomach tissue, rat stomach tissue.

Subcellular location: Nucleus.

Database links: SwissProt: P23771 Human | P23772 Mouse
Entrez Gene: 85471 Rat

Recommended Dilutions:

WB	1:1,000-1:2,000
IHC-P	1:50-1:200
IP	Use at an assay dependent concentration.
IF-Tissue	1:50

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

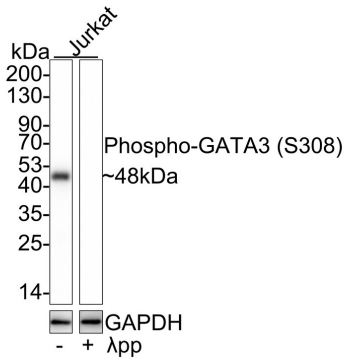

Fig1: Western blot analysis of Phospho-GATA3 (S308) on different lysates with Rabbit anti-Phospho-GATA3 (S308) antibody (ET1609-17) at 1/2,000 dilution.

Lane 1: Jurkat cell lysate
Lane 2: Jurkat cell lysate, treated with λpp for 1 hour

Lysates/proteins at 15 µg/Lane.

Predicted band size: 48 kDa
Observed band size: 48 kDa

Exposure time: 3 minutes;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET1609-17) at 1/2,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:100,000 dilution was used for 1 hour at room temperature.

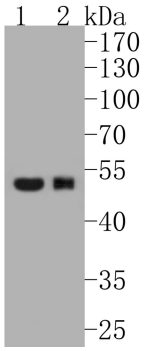

Fig2: Western blot analysis of Phospho-GATA3 (S308) on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ET1609-17, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:5,000 dilution was used for 1 hour at room temperature.
Positive control:
Lane 1: human skin tissue lysate
Lane 2: Jurkat cell lysate

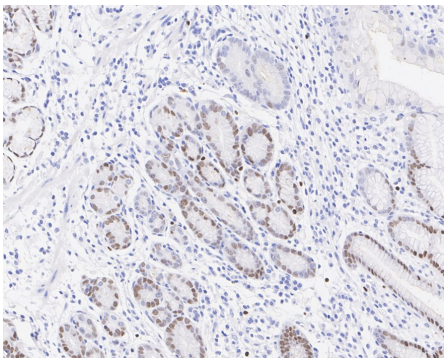

Fig3: Immunohistochemical analysis of paraffin-embedded human stomach tissue with Rabbit anti-Phospho-GATA3 (S308) antibody (ET1609-17) at 1/50 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1609-17) at 1/50 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

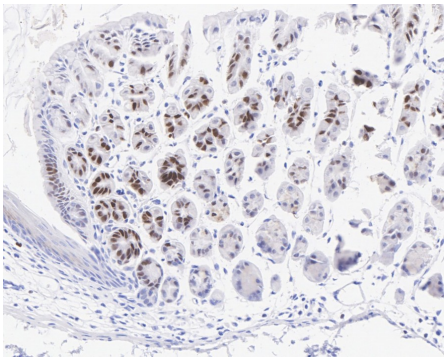

Fig4: Immunohistochemical analysis of paraffin-embedded mouse stomach tissue with Rabbit anti-Phospho-GATA3 (S308) antibody (ET1609-17) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1609-17) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

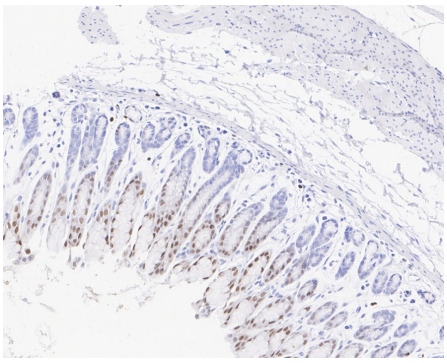

Fig5: Immunohistochemical analysis of paraffin-embedded rat stomach tissue with Rabbit anti-Phospho-GATA3 (S308) antibody (ET1609-17) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET1609-17) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

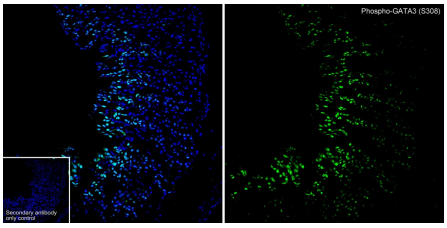

Fig6: Application: IF-Tissue

Species: Mouse

Site: stomach

Sample: Paraffin-embedded section

Antibody concentration: 1/50

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Kim TH et al. Identification of Creb3l4 as an essential negative regulator of adipogenesis. Cell Death Dis 5:e1527 (2014).
2. Izzo F et al. Progesterone receptor activation downregulates GATA3 by transcriptional repression and increased protein turnover promoting breast tumor growth. Breast Cancer Res 16:491 (2014).

Applications:WB=Western blot IHC-P=Immunohistochemistry (paraffin) IF-Cell=Immunofluorescence (Cell) IF-Tissue=Immunofluorescence (Tissue) FC=Flow cytometry IP=Immunoprecipitation