Anti-GST Antibody [SN70-05]

ET1611-47

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Species independent
Applications:	WB, IF-Cell, IP
Clone number:	SN70-05

Description: The glutathione S-transferase (GST) family of enzymes comprises a long list of cytosolic, mitochondrial, and microsomal proteins that are capable of multiple reactions with a multitude of substrates, both endogenous and xenobiotic. Mammalian cytosolic GSTs are dimeric both subunits being from the same class of GSTs. The monomers are in the range of 22–29 kDa. Glutathione S-transferase is used to create the “GST gene fusion system” in genetic engineering. Here, GST is used to purify and detect proteins of interest.

Immunogen: GST tag recombinant protein.

Positive control: 293T transfected with GST cell lysate, 293T transfected with GST-tagged Histone H3.1 cell lysate, HeLa transfected with GST-tagged Histone H3.1 cells.

Recommended Dilutions:

WB	1:1,000-1:50,000
IF-Cell	1:50-1:200
IP	Use at an assay dependent concentration.

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

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

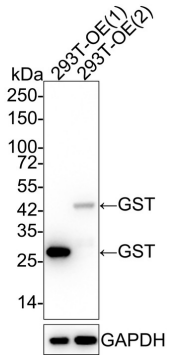

Fig1: Western blot analysis of GST on different lysates with Rabbit anti-GST antibody (ET1611-47) at 1/50,000 dilution.

Lane 1: 293T transfected with GST cell lysate (2.5 µg/Lane)
Lane 2: 293T transfected with GST-tagged Histone H3.1 cell lysate (15 µg/Lane)

Exposure time: 46 seconds;

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 (ET1611-47) at 1/50,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

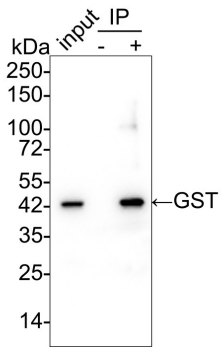

Fig2: GST was immunoprecipitated in 0.2mg 293T-OE-GST cell lysate with ET1611-47 at 2 µg/25 µl agarose. Western blot was performed from the immunoprecipitate using ET1611-47 at 1/50,000 dilution. Anti-Rabbit IgG for IP Nano-secondary antibody (NBI01H) at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: 293T transfected with GST-tagged Histone H3.1 cell lysate (input)
Lane 2: Rabbit IgG instead of ET1611-47 in 293T transfected with GST-tagged Histone H3.1 cell lysate
Lane 3: ET1611-47 IP in 293T transfected with GST-tagged Histone H3.1 cell lysate

Blocking/Dilution buffer: 5% NFDM/TBST
Exposure time: 24 seconds

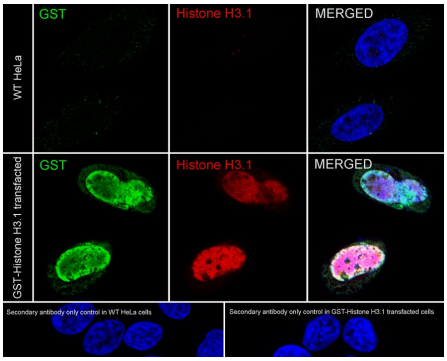

Fig3: Immunocytochemistry analysis of HeLa transfected with GST-tagged Histone H3.1 cells labeling GST with Rabbit anti-GST antibody (ET1611-47) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 20 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 5 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-GST antibody (ET1611-47) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Histone H3 (HA601278, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

Background References

1. Pettit MW et al. Construction and physiochemical characterisation of a multi-composite, potential oral vaccine delivery system (VDS). Int J Pharm 468:264-71 (2014).
2. Zhang D et al. The Chromatin-Remodeling Factor PICKLE Integrates Brassinosteroid and Gibberellin Signaling during Skotomorphogenic Growth in Arabidopsis. Plant Cell 26:2472-2485 (2014).