Anti-GITR Antibody [PSH04-06] - BSA and Azide free

HA750929

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IF-Cell, FC
Molecular Wt:	Predicted band size: 26 kDa
Clone number:	PSH04-06

Description: Tumor necrosis factor receptor superfamily member 18 (TNFRSF18), also known as glucocorticoid-induced TNFR-related protein (GITR) or CD357. GITR is encoded and tnfrsf18 gene at chromosome 4 in mice. GITR is type I transmembrane protein and is described in 4 different isoforms. GITR human orthologue, also called activation-inducible TNFR family receptor (AITR), is encoded by the TNFRSF18 gene at chromosome 1. GITR is a member of TNFR superfamily and shares high homology in cytoplasmic domain, characterized with cysteine pseudo-repeats, with other members of TNFRSF, such as CD137, OX40 or CD27. GITR is constitutively expressed on CD25+CD4+ regulatory T cells and its expression is upregulated on all T cell subsets after activation. GITR is also expressed on murine neutrophils and NK cells. GITR interacts with its ligand (GITRL) that is expressed on antigen-presenting cells (APC) and endothelial cells.

Immunogen: Recombinant protein within human GITR aa 1-162 / 241.

Positive control: HUT 102 cell lysates, HUT 102.

Subcellular location: Cell membrane; Secreted.

Database links: SwissProt: Q9Y5U5 Human

Recommended Dilutions:

WB	1:1,000
IF-Cell	1:200
FC	1:1,000

Storage Buffer: 1*PBS (pH7.4).

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

Purity: Protein A affinity purified.

Images

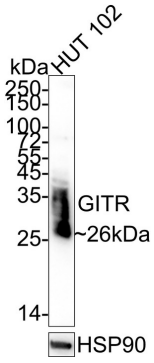

Fig1: Western blot analysis of GITR on HUT 102 cell lysates with Rabbit anti-GITR antibody (HA750929) at 1/1,000 dilution.

Lysates/proteins at 20 µg/Lane.

Predicted band size: 26 kDa
Observed band size: 26 kDa

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 (HA750929) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

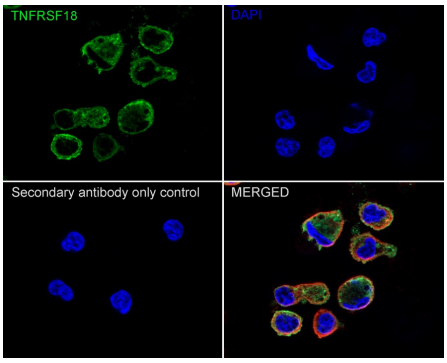

Fig2: Immunocytochemistry analysis of HUT 102 cells labeling GITR with Rabbit anti-GITR antibody (HA750929) at 1/200 dilution.

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-GITR antibody (HA750929) at 1/200 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.

Beta tubulin (M1305-2, 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.

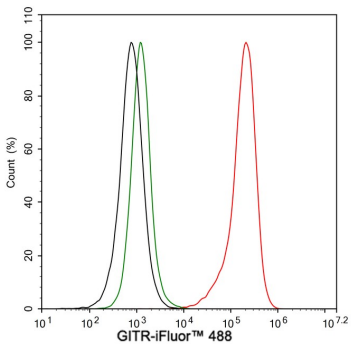

Fig3: Flow cytometric analysis of HUT 102 cells labeling GITR.

Cells were washed twice with cold PBS and resuspend. Then stained with the primary antibody (HA750929, 1µg/mL) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Background References

1. Ke S et al. High-level of intratumoral GITR+ CD4 T cells associate with poor prognosis in gastric cancer. iScience. 2022 Nov
2. Tian J et al. The Role of GITR/GITRL Interaction in Autoimmune Diseases. Front Immunol. 2020 Oct