

## Product datasheet

# Anti-GITR antibody [CAL52] - BSA and Azide free ab251600

Recombinant RabMAb

7 Images

### Overview

Product name	Anti-GITR antibody [CAL52] - BSA and Azide free
Description	Rabbit monoclonal [CAL52] to GITR - BSA and Azide free
Host species	Rabbit
Tested applications	<b>Suitable for:</b> IHC-P, Flow Cyt (Intra), ICC/IF, IP <b>Unsuitable for:</b> WB
Species reactivity	<b>Reacts with:</b> Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human tonsil tissue. ICC/IF: HEK-293T cells. IP: HEK-293T and Hut-78 whole cell lysate. Flow: Human peripheral blood mononuclear cells.
General notes	<p>ab251600 is the carrier-free version of <a href="#">ab237713</a>.</p> <p>Our <b>carrier-free</b> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our <b>conjugation kits</b> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.</p>

### Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2

	Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Purification notes</b>	Purity is greater than 99%.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	CAL52
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab251600 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

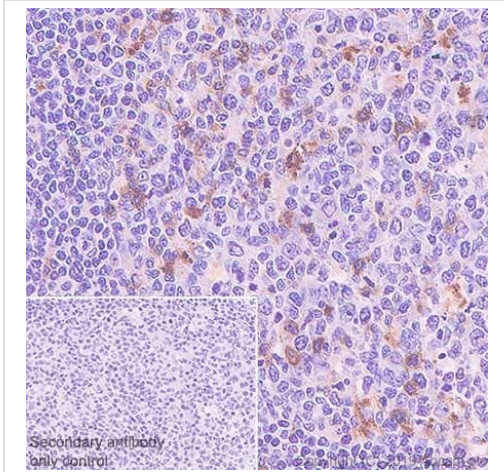
Application	Abreviews	Notes
IHC-P		Use at an assay dependent concentration. Boil tissue section in TRIS EDTA buffer for 24 min followed by cooling at room temperature for 30-45 min. Primary antibody incubation for 75 minutes at room temperature.
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.

**Application notes** Is unsuitable for WB.

## Target

<b>Function</b>	Receptor for TNFSF18. Seems to be involved in interactions between activated T-lymphocytes and endothelial cells and in the regulation of T-cell receptor-mediated cell death. Mediated NF-kappa-B activation via the TRAF2/NIK pathway.
<b>Tissue specificity</b>	Expressed in lymph node, peripheral blood leukocytes and weakly in spleen.
<b>Sequence similarities</b>	Contains 3 TNFR-Cys repeats.
<b>Cellular localization</b>	Secreted and Cell membrane.

## Images

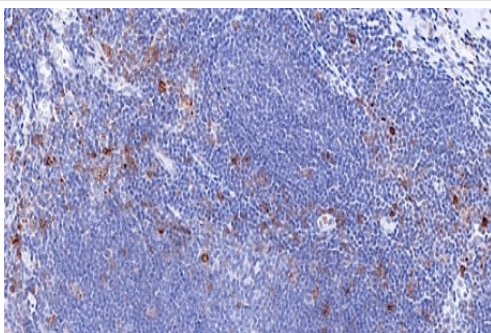


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GITR antibody [CAL52] - BSA and Azide free (ab251600)

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling GITR with [ab237713](#) at 1/4000 dilution, followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Positive staining on the human tonsil is observed. Counter stained with Hematoxylin. The section was incubated with [ab237713](#) for 10 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)).

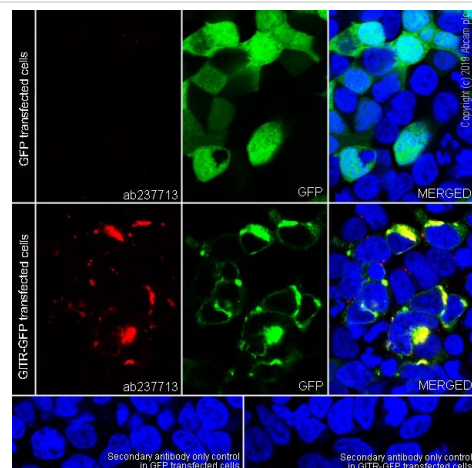
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab237713](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GITR antibody [CAL52] - BSA and Azide free (ab251600)

Formalin-fixed, paraffin-embedded human tonsil tissue stained for TNFSF18 using [ab237713](#) at 0.25 µg/ml in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab237713](#)).

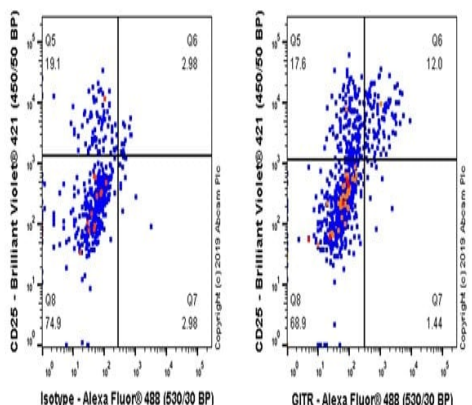


Immunocytochemistry/ Immunofluorescence - Anti-GlTR antibody [CAL52] - BSA and Azide free (ab251600)

4% Paraformaldehyde-fixed 0.1% TritonX-100 permeabilized HEK-293T (human embryonic kidney epithelial cell) cells labeling GTR with **ab237713** at 1/50 dilution followed by a AlexaFluor®594 Goat anti-Rabbit secondary (**ab150080**) at a 1/500 dilution (Green). The nuclear counterstain was DAPI (Blue). Confocal image showing Positive staining in HEK-293T cells transfected with a GFP-tagged GTR expression construct.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is an AlexaFluor®594 Goat anti-Rabbit secondary (**ab150080**) at a 1/500 dilution.

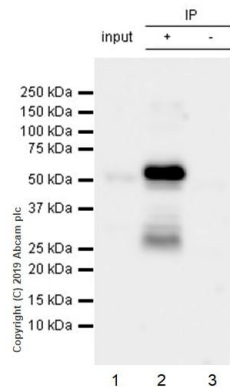
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab237713**).



Flow Cytometry (Intracellular) - Anti-GITR antibody  
[CAL52] - BSA and Azide free (ab251600)

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed, 0.1% tween-20 permeabilized Human peripheral blood mononuclear cell (PBMC) treated with 10µg/ml PHA for 48h, labeling GITR with **ab237713** at 1/500 dilution. The secondary antibody was a Goat anti rabbit IgG (Alexa Fluor® 488, **ab150097**) at 1/500 dilution. Cells were surface stained with anti-CD25 conjugated to BV421. Then fixed with 2% PFA followed by intracellular staining rabbit IgG (Left) or **ab237713** (Right). The isotype control used was a Rabbit monoclonal IgG (**ab172730**, Left).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab237713**).



Immunoprecipitation - Anti-GITR antibody [CAL52] - BSA and Azide free (ab251600)

GITR was immunoprecipitated from 0.35 mg Hut-78 (Human Sezary syndrome cutaneous T lymphocyte) whole cell lysate using **ab237713** at 1/30 dilution. western blot was performed on the immunoprecipitate using **ab237713** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used as the secondary antibody at 1/5000 dilution.

Lane 1: Hut-78 whole cell lysate 10 µg (input)

Lane 2: **ab237713** IP in Hut-78 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab237713** in Hut-78 whole cell lysate.

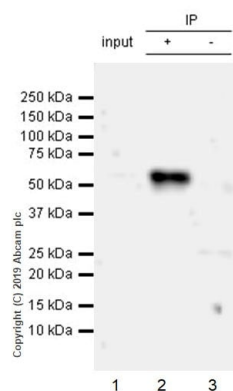
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 15 seconds.

This blot was developed using a higher sensitivity ECL substrate.

Dimerized GITR was also observed at 52kDa

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab237713**).



Immunoprecipitation - Anti-GITR antibody [CAL52] - BSA and Azide free (ab251600)

GITR was immunoprecipitated from 0.35 mg HEK-293T (Human embryonic kidney epithelial cell) transfected with GFP-tagged GITR overexpression vector whole cell lysate using **ab237713** at 1/30 dilution. western blot was performed on the immunoprecipitate using **ab237713** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used as the secondary antibody at 1/5000 dilution.

Lane 1: Hut-78 whole cell lysate 10 µg (input)

Lane 2: **ab237713** IP in Hut-78 whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab237713** in 293T transfected with GFP-tagged GITR overexpression vector whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 minutes.

This blot was developed using a higher sensitivity ECL substrate.

Dimerized GITR was also observed at 52kDa

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab237713**).

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-GITR antibody [CAL52] - BSA and Azide free  
(ab251600)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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