abcam

ab237725

Anti-GITR/CD357 antibody [CAL61]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	CAL61
Purification technique	Affinity purification Protein A
Concentration	0.517 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purity >99%

Reactivity data

IP

Not recommended

Species	Mouse
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

ICC/IF

Not recommended

Species	Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/500
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/500
Notes	-

Target data

See full target information GITR/CD357

Function 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 (By similarity).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	GITR also known as TNFRSF18 is a 241 amino acid protein with a mass of approximately 27 kDa. It belongs to the tumor necrosis factor receptor superfamily. GITR is highly expressed on activated T cells and regulatory T cells (Tregs). The gene encoding GITR is located on chromosome 1 in humans. High surface expression is also observed in immune tissues such as the thymus spleen and lymph nodes playing an important role in immune responses.
Biological function summary	GITR acts as a costimulatory molecule that enhances T cell activation and proliferation. It does not function as part of a complex but interacts directly with ligand GITRL triggering downstream signaling cascades. This interaction is key in the modulation of immune responses notably in enhancing the activity of effector T cells and regulating Treg functions. Activation of GITR can reduce Treg-mediated suppression leading to enhanced immune responses.
Pathways	The mechanistic role of GITR involves NF-kB and MAPK signaling pathways. Through these GITR impacts immune responses by stimulating the production of cytokines and promoting cell survival and proliferation. GITR signaling intersects with pathways involving proteins such as NF-kB further integrating with the immune system's regulation crescendo.

Associated diseases and disorders	GITR appears to play a role in autoimmune conditions like rheumatoid arthritis and potential cancer immunotherapy. In autoimmune diseases GITR modulates immune activity influencing the balance between inhibition and activation of T cells. In oncology GITR targeting aims to enhance immune responses against tumors. Through these conditions GITR shows connections to proteins such as CTLA-4 which also contributes to immune regulatory processes.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

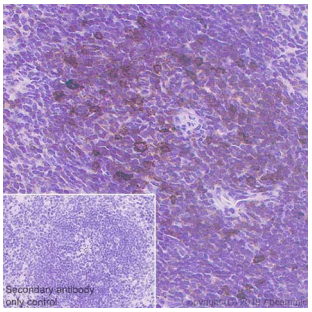
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

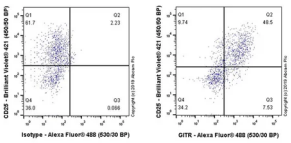
5 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GITR/CD357 antibody [CAL61] (ab237725)

GITR/CD357 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-GITR/CD357 antibody

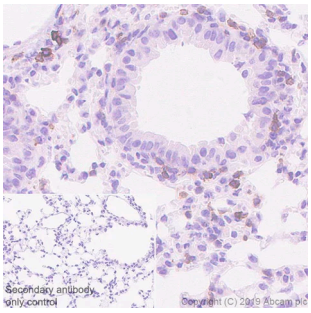
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling GITR with ab237725 at 1/500 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on the mouse spleen is observed. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP). Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).



Flow Cytometry (Intracellular) - Anti-GITR/CD357 antibody [CAL61] (ab237725)

GITR/CD357 Flow Cytometry (Intracellular) staining using rabbit Anti-GITR/CD357 antibody

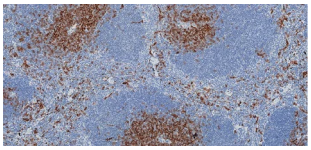
Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed,0.1% Tween-20permeabilized mouse splenocytes treated with 2.5µg/ml concanavalin A for 3 days labeling GITR with ab237725 at 1/500 (right panel) compared with a Rabbit monoclonal IgG (ab172730) (left panel). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077), at 1/2000 dilution was used as the secondary antibody. Cells were surface stained with anti-CD25 conjugated to BV421. Then fixed with 2% PFA followed by intracellularly stained with rabbit IgG (Left) or ab237725 (Right).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GITR/CD357 antibody [CAL61] (ab237725)

GITR/CD357 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-GITR/CD357 antibody

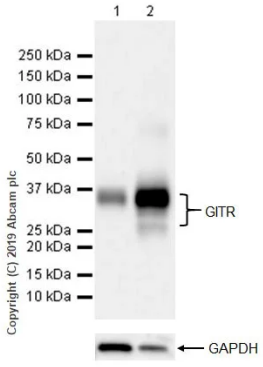
Immunohistochemical analysis of paraffin-embedded mouse lung tissue labeling GITR with ab237725 at 1/500 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining on the mouse lung is observed. Counterstained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP). Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GITR/CD357 antibody [CAL61] (ab237725)

GITR/CD357 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-GITR/CD357 antibody

Formalin-fixed, paraffin-embedded mouse spleen tissue stained for GITR using ab237725 at 0.125 µg/ml dilution in immunohistochemical analysis.



Western blot - Anti-GITR/CD357 antibody [CAL61] (ab237725)

GITR/CD357 Western blot staining using rabbit Anti-GITR/CD357 antibody

33 kDa band represents GITR isoform B based on Uniprot and literature. (PMID: 10836847). Blocking/Dilution buffer: 5% NFDM/TBST.

All lanes:
Western blot - Anti-GITR/CD357 antibody [CAL61] (ab237725) at 1/1000 dilution

Lane 1:
Untreated mouse splenocytes whole cell lysate at 20 µg

Lane 2:
Mouse splenocytes treated with 2.5µg/ml concanavalin A for 3 days whole cell lysate at 20 µg

Secondary

All lanes:

Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 26 kDa

Exposure time: 3min

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.