abcam

Product datasheet

Anti-CTLA4 antibody [CAL49] - BSA and Azide free ab251599

重组 RabMAb

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概述

产品名称	Anti-CTLA4抗体[CAL49] - BSA and Azide free
描述	兔单克隆抗体[CAL49] to CTLA4 - BSA and Azide free
宿主	Rabbit
经测试应用	**适用于:** IHC-P, Flow Cyt (Intra), WB, IP **不适用于:** ICC/IF
种属反应性	**与反应:** Mouse, Human, Rhesus monkey
免疫原	Synthetic peptide within Human CTLA4 aa 150 to the C-terminus. The exact sequence is proprietary. Database link: **P16410**
阳性对照	IHC-P: Human tonsil, lymph node and breast carcinoma tissues. WB: Human PBMCs (treated with 10Âµg/ml PHA for 2 days) whole cell lysate; mouse splenocytes (treated with 2.5Âµg/ml Concanavalin A (ConA) for 3 days) whole cell lysate. Flow Cyt (intra): Human PBMCs (treated with 10Âµg/ml PHA for 2 days); mouse splenocytes (treated with 2.5Âµg/ml Concanavalin A (ConA) for 3 days). IP: Human tonsil lysate.
常规说明	ab251599 is the carrier-free version of **ab237712**. Our **carrier-free** 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. 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. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

性能

形式	Liquid

存放说明	Shipped at 4°C. Store at +4°C. Do Not Freeze.
存储溶液	pH: 7.2 Constituent: PBS
无载体	**是**
纯度	Protein A purified
纯化说明	Purity is greater than 99%.
克隆	单克隆
克隆编号	CAL49
同种型	IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab251599于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P	★★★★☆ (4)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt (Intra)		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 25 kDa (predicted molecular weight: 25 kDa).
IP		Use at an assay dependent concentration.

应用说明 Is unsuitable for ICC/IF.

靶标

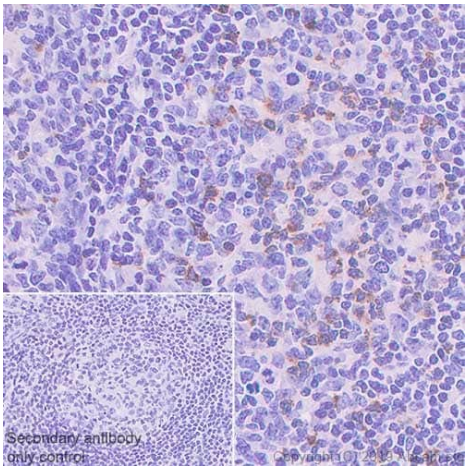
功能 Inhibitory receptor acting as a major negative regulator of T-cell responses. The affinity of CTLA4 for its natural B7 family ligands, CD80 and CD86, is considerably stronger than the affinity of their cognate stimulatory coreceptor CD28.

组织特异性 Widely expressed with highest levels in lymphoid tissues. Detected in activated T-cells where expression levels are 30- to 50-fold less than CD28, the stimulatory coreceptor, on the cell surface following activation.

疾病相关 Genetic variation in CTLA4 influences susceptibility to systemic lupus erythematosus (SLE) [MIM:152700]. SLE is a chronic, inflammatory and often febrile multisystemic disorder of connective tissue. It affects principally the skin, joints, kidneys and serosal membranes. SLE is thought to represent a failure of the regulatory mechanisms of the autoimmune system. Note=Genetic variations in CTLA4 may influence susceptibility to Graves disease, an autoimmune disorder associated with overactivity of the thyroid gland and hyperthyroidism. Genetic variation in CTLA4 is the cause of susceptibility to diabetes mellitus insulin-dependent type 12 (IDDM12) [MIM:601388]. A multifactorial disorder of glucose homeostasis that is characterized by susceptibility to ketoacidosis in the absence of insulin therapy. Clinical fetaures

	are polydipsia, polyphagia and polyuria which result from hyperglycemia-induced osmotic diuresis and secondary thirst. These derangements result in long-term complications that affect the eyes, kidneys, nerves, and blood vessels. Genetic variation in CTLA4 is the cause of susceptibility to celiac disease type 3 (CELIAC3) [MIM:609755]. It is a multifactorial disorder of the small intestine that is influenced by both environmental and genetic factors. It is characterized by malabsorption resulting from inflammatory injury to the mucosa of the small intestine after the ingestion of wheat gluten or related rye and barley proteins. In its classic form, celiac disease is characterized in children by malabsorption and failure to thrive.
序列相似性	Contains 1 Ig-like V-type (immunoglobulin-like) domain.
翻译后修饰	N-glycosylation is important for dimerization. Phosphorylation at Tyr-201 prevents binding to the AP-2 adapter complex, blocks endocytosis, and leads to retention of CTLA4 on the cell surface.
细胞定位	Cell membrane. Exists primarily an intracellular antigen whose surface expression is tightly regulated by restricted trafficking to the cell surface and rapid internalisation and.

图片



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CTLA4 antibody [CAL49] - BSA and Azide free (ab251599)

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling CTLA4 with **ab237712** at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ready to use. Positive staining on human tonsil is observed. Counter stained with hematoxylin.

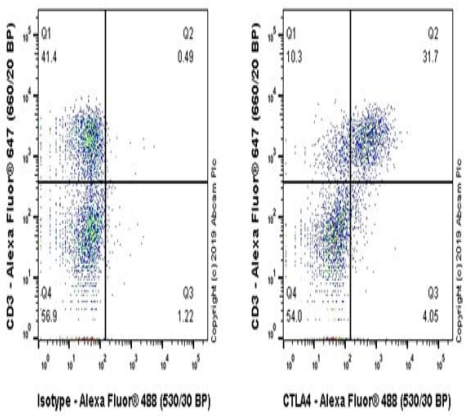
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

The section was incubated with **ab237712** for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237712**).



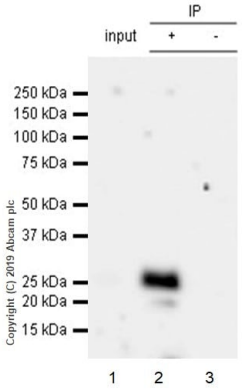
Flow Cytometry (Intracellular) - Anti-CTLA4 antibody [CAL49] - BSA and Azide free (ab251599)

Intracellular flow cytometric analysis of2% paraformaldehyde-fixed, 0.1% Tween 20 permeabilized mouse splenocytes (treated with 2.5µg/ml Concanavalin A (ConA) for 3 days) cells labeling CTLA4 with **ab237712** at 1/400 (Right) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (Left).

Cells were surface stained with anti-CD3 conjugated to Alexa Fluor®647. Then fixed with 2% PFA for 10min followed by intracellular staining with rabbit IgG (Left) and **ab237712** (Right).

Goat Anti-Rabbit IgG Fc (Alexa Fluor®488) preadsorbed (**ab150097**), at 1/2000 dilution was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237712**).



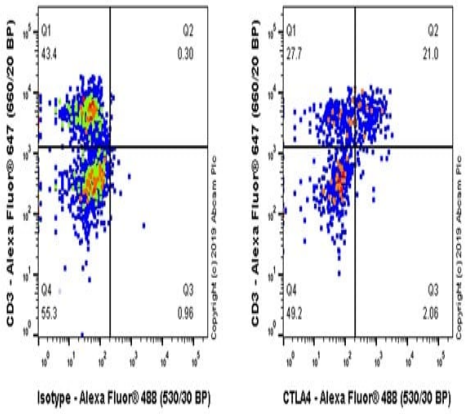
Immunoprecipitation - Anti-CTLA4 antibody [CAL49] - BSA and Azide free (ab251599)

CTLA4 was immunoprecipitated from 0.35 mh human tonsil lysate with **ab237712** at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab237712** at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used as secondary antibody at 1/1000 dilution.

Lane 1: Human tonsil lysate 10 µg (Input).
Lane 2: **ab237712** IP in human tonsil lysate.
Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab237712** in human tonsil lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.
Exposure time: 30 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237712**).



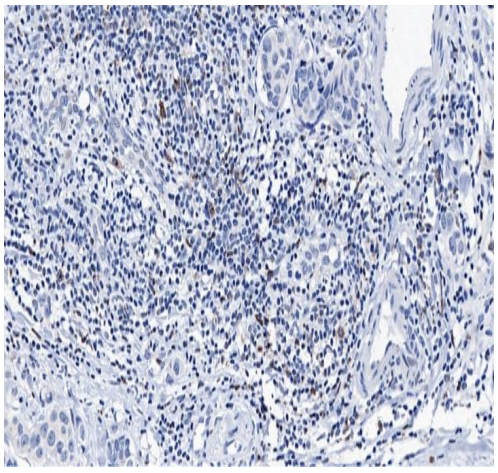
Flow Cytometry (Intracellular) - Anti-CTLA4 antibody [CAL49] - BSA and Azide free (ab251599)

Intracellular flow cytometric analysis of 2% paraformaldehyde-fixed, 0.1% Tween 20 permeabilized human PBMC (peripheral blood mononuclear cell) (treated with 10µg/ml PHA for 2 days) cells labeling CTLA4 with **ab237712** at 1/400 (Right) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control (**ab172730**) (Left).

Cells were surface stained with anti-CD3 conjugated to Alexa Fluor® 647. Then fixed with 2% PFA for 10min followed by intracellular staining with rabbit IgG (Left) and **ab237712** (Right).

Goat Anti-Rabbit IgG Fc (Alexa Fluor® 488) preadsorbed (**ab150097**), at 1/2000 dilution was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237712**).

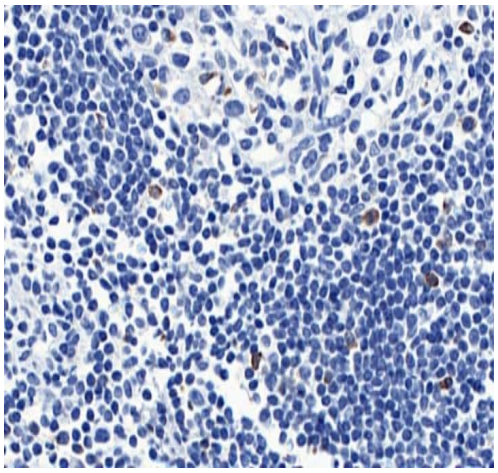


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CTLA4 antibody [CAL49] - BSA and Azide free (ab251599)

Formalin-fixed, paraffin-embedded human breast carcinoma tissue stained for CTLA4 using **ab237712** at 0.25 µg/ml in immunohistochemical analysis.

Incubate with primary antibody for 75 minutes at room temperature.

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237712**).

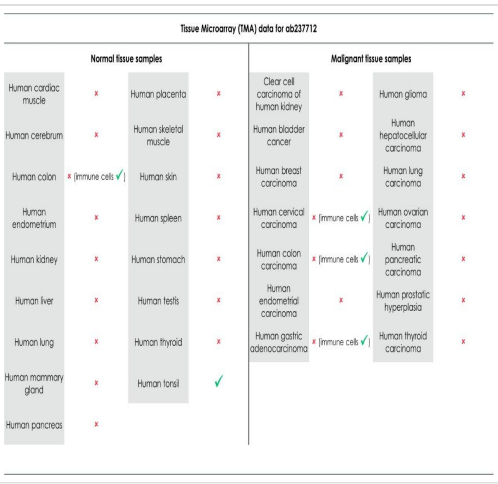


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CTLA4 antibody [CAL49] - BSA and Azide free (ab251599)

Formalin-fixed, paraffin-embedded human lymph node tissue stained for CTLA4 using **ab237712** at 0.25 µg/ml in immunohistochemical analysis.

Incubate with primary antibody for 75 minutes at room temperature.

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (**ab237712**).

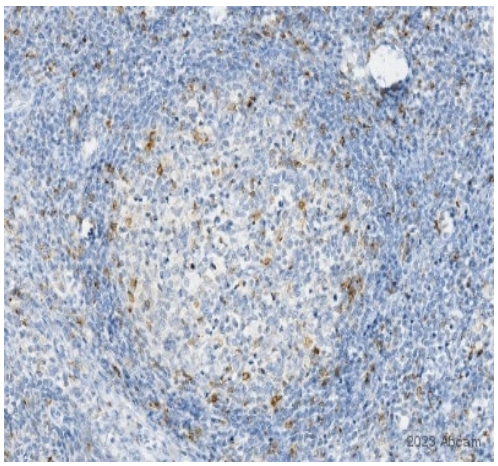


Tissue Microarray (TMA) data for ab237712

Normal tissue samples				Malignant tissue samples			
Human cardiac muscle	x	Human placenta	x	Clear cell carcinoma of human kidney	x	Human glioma	x
Human cerebrum	x	Human skeletal muscle	x	Human bladder cancer	x	Human hepatocellular carcinoma	x
Human colon	x (immune cells ✓)	Human skin	x	Human breast carcinoma	x	Human lung carcinoma	x
Human endometrium	x	Human spleen	x	Human cervical carcinoma	x (immune cells ✓)	Human ovarian carcinoma	x
Human kidney	x	Human stomach	x	Human colon carcinoma	x (immune cells ✓)	Human pancreatic carcinoma	x
Human liver	x	Human testis	x	Human endometrial carcinoma	x	Human prostatic hyperplasia	x
Human lung	x	Human thyroid	x	Human gastric adenocarcinoma	x (immune cells ✓)	Human thyroid carcinoma	x
Human mammary gland	x	Human tonsil	✓				
Human pancreas	x						

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CTLA4 antibody [CAL49] - BSA and Azide free (ab251599)

Tissue Microarrays stained for " Anti-CTLA4 antibody [CAL49]" using " **ab237712**" in immunohistochemical analysis. This table provides a detailed overview of positive (tick mark) and negative (cross mark) staining per sample type tested. The sections were pre-treated using Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) for 30 minutes. The sections were incubated with **ab237712** for 30 mins at room temperature followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CTLA4 antibody [CAL49] - BSA and Azide free (ab251599)

This image is courtesy of Dr. Chi Ngai Chan

Immunohistochemical analysis of paraffin-embeded Rhesus monkey tonsil tissue labeling CTLA4 with ab251599 followed by Polink 1 Polymer HRP anti-Rabbit IgG.

Heat mediated antigen retrieval-Buffer/Enzyme Used: Dako pH9.

Anti-CTLA4 antibody [CAL49] - BSA and Azide free (ab251599)

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