# abcam

# Product datasheet

# Regulatory T Cell Marker (CD4, FOXP3, CTLA4, CCR6, HLA-DR) Antibody Panel - Human ab254021

# 7 Images

#### Overview

**Product name** 

Species reactivity

**Product overview** 

 $Regulatory\ T\ Cell\ Marker\ (CD4,\ FOXP3,\ CTLA4,\ CCR6,\ HLA-DR)\ Antibody\ Panel\ -\ Human$ 

Reacts with: Human

Regulatory T Cell Marker (CD4, FOXP3, CTLA4, CCR6, HLA-DR) Antibody Panel - Human ab254021 contains multiple trial-sized versions of anti-human antibody clones against CD4, FOXP3, CTLA4, CCR6, HLA-DR, specifically selected for high performance in various applications. This panel contains 5 recombinant rabbit monoclonal antibodies against human CD4, FOXP3, CTLA4, CCR6 and 1 mouse monoclonal antibody against HLA-DR. They are provided as a sampler panel to allow you to easily evaluate each in your required applications.

For guidelines on how to use each antibody within the panel, please consult the individual datasheet for each antibody.

#### Panel contains:

- Rabbit monoclonal [EPR6855] to CD4 (20 µL) ab133616
- Rabbit monoclonal [EPR22102-37] to FOXP3 (20 µL) ab215206
- Rabbit monoclonal [CAL49] to CTLA4 (20 µL) ab237712
- Rabbit monoclonal [EPR22259] to CCR6 (20 μL) ab227036
- Mouse monoclonal [TAL 1B5] to HLA-DR (20 μg) <u>ab20181</u>

**Explore our range of antibody sample panels** designed to provide you with a variety of trial-size antibodies in a convenient and cost-effective format.

<u>Carrier-free formulations</u> of our recombinant antibodies are available and ready to use for multiplex IHC analysis including Imaging Mass Cytometry<sup>TM</sup>. Please refer to the 'Associated products' section below.

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

Notes

#### **Properties**

#### Storage instructions

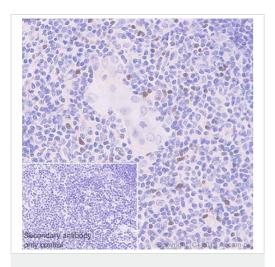
Store at -20°C. Please refer to protocols.

Components	1 kit
ab227036 - Anti-CCR6 antibody [EPR22259]	2 x 10µl
<u>ab133616 - Anti-CD4 antibody [EPR6855]</u>	2 x 10µl
ab237712 - Anti-CTLA4 antibody [CAL49]	2 x 10µl
ab215206 - Anti-FOXP3 antibody [EPR22102-37]	2 x 10µl
ab20181 - Anti-HLA-DR antibody [TAL 1B5]	2 x 10µg

#### **Cellular localization**

CD4: Cell membrane. Localizes to lipid rafts. Removed from plasma membrane by HIV-1 Nef protein that increases clathrin-dependent endocytosis of this antigen to target it to lysosomal degradation. Cell surface expression is also down-modulated by HIV-1 Envelope polyprotein gp160 that interacts with, and sequesters CD4 in the endoplasmic reticulum. HLA-DR: Cell membrane. Endoplasmic reticulum membrane. Golgi apparatus > trans-Golgi network membrane. Endosome membrane. Lysosome membrane. Late endosome membrane. The MHC class Il complex transits through a number of intracellular compartments in the endocytic pathway until it reaches the cell membrane for antigen presentation. CTLA4: Cell membrane. Exists primarily an intracellular antigen whose surface expression is tightly regulated by restricted trafficking to the cell surface and rapid internalisation and. CCR6: Cell membrane. FOXP3: Nucleus.

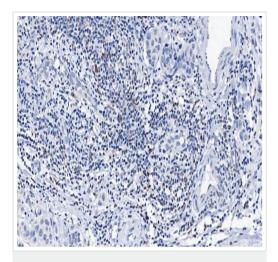
#### **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FOXP3 antibody
[EPR22102-37]

Immunohistochemical analysis of paraffin-embedded human thymus tissue labeling FOXP3 with <a href="mailto:ab215206">ab215206</a> at 1/1000 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (<a href="mailto:ab209101">ab209101</a>). Nuclear staining on regulatory T-cells in human thymus (PMID: 16380964) is observed. Counter stained with hematoxylin. Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB (<a href="mailto:ab209101">ab209101</a>).

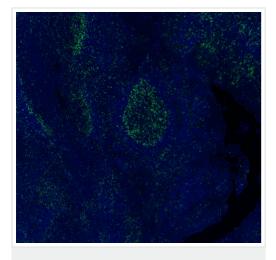
Heat mediated antigen retrieval using <u>ab208572</u> (Universal HIER antigen retrieval reagent).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CTLA4 antibody [CAL49]

Formalin-fixed, paraffin-embedded human breast carcinoma tissue stained for CTLA4 using  $\underline{ab237712}$  at 0.25  $\mu$ g/ml in immunohistochemical analysis.

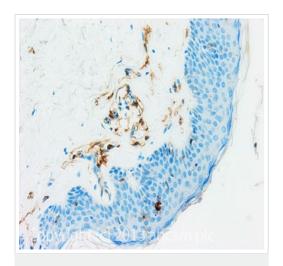
Incubate with primary antibody for 75 minutes at room temperature.



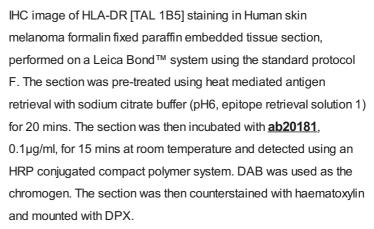
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD4 antibody [EPR6855]

### Anti-CD4 antibody [EPR6855] (ab133616)

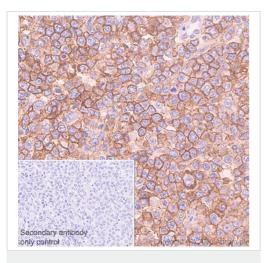
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling CD4 with <a href="mailto:ab133616">ab133616</a> at a dilution of 1:500. Heat mediated antigen retrieval was performed using AR9 antigen retrieval solution, and microwave treatment for 15 min at 20% power. Anti-Rabbit/Mouse HRP polymer (PerkinElmer Opal Polymer HRP Ms Plus Rb) was used as secondary antibody. Opal tyramide amplification was performed using Opal 520 fluorophore. Counterstained with DAPI stain. Image scanned with Vectra 3.0 and analyzed via Phenochart software. This image was courteously provided by Dr. Houssein Abdul Sater, Georgia Cancer Center.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-HLA-DR antibody [TAL 1B5]



For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

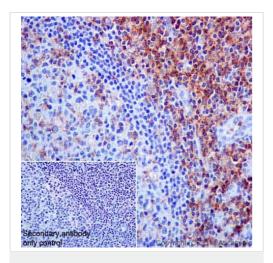


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CCR6 antibody

[EPR22259]

Immunohistochemical analysis of paraffin-embedded human Hodgkin's lymphoma tissue labeling CCR6 with <u>ab227036</u> at 1/1000 dilution, followed by the ready to use Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>). Membranous staining on human Hodgkin's lymphoma (PMID: 12514792) is observed. Counterstained with hematoxylin.

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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD4 antibody [EPR6855]

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human tonsil tissue labelling CD4 with purified **ab133616** at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit lgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



CCR6, HLA-DR) Antibody Panel - Human

(ab254021)

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