

Spark YG™ 570 anti-human CD4 Antibody

Catalog# / Size	396203 / 25 µg
Clone	A17070D
Regulatory Status	RUO
Other Names	T4/Leu-3
Isotype	Mouse IgG2b, κ
Description	CD4, also known as T4/Leu-3, is a 55 kD single-chain type I transmembrane glycoprotein and member of the immunoglobulin superfamily. It is expressed on most thymocytes, helper T cells, type II NKT cells, and monocytes/macrophages. CD4 is part of the TCR/CD3 complex, binds to β2 domain from the MHC class II molecule, and participates in TCR signal transduction. CD4 is the receptor of IL-16 and is a coreceptor for the human immunodeficiency virus (HIV) and human herpes virus 7 (HHV-7).

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Recombinant human CD4
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Preparation	The antibody was purified by affinity chromatography and conjugated with Spark YG™ 570 under optimal conditions.
Concentration	0.5 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	IHC-P - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by formalin-fixed paraffin-embedded immunohistochemical staining. For immunohistochemistry, a concentration range of 5.0 - 10.0 µg/mL is suggested. It is recommended that the reagent be titrated for optimal performance for each application. * Spark YG™ 570 has a maximum excitation of 555 nm and a maximum emission of 570 nm.
Excitation Laser	Green Laser (532 nm)/Yellow-Green Laser (561 nm)
RRID	AB_2904418 (BioLegend Cat. No. 396203)

Antigen Details

Structure	55 kD, type I transmembrane glycoprotein, member of the Ig superfamily
Distribution	Helper T cells, subset of thymocytes, monocytes/macrophages, type II NKT cells
Interaction	Part of the TCR/CD3 complex
Ligand/Receptor	β2 domain from the MHC class II
Antigen References	1. Zhu J, <i>et al.</i> 2010. <i>Annu Rev. Immunol.</i> 28:445. 2. Vignali DA. 2010. <i>J. Immunol.</i> 184:5933.

3. Zhou L, *et al.* 2009. *Immunity* 30:646.
4. Singer A, *et al.* 2008. *Nat. Rev. Immunol.* 8:788.
5. Zhu J and Paul WE. 2008. *Blood* 112:1557.

Gene ID [920](#)

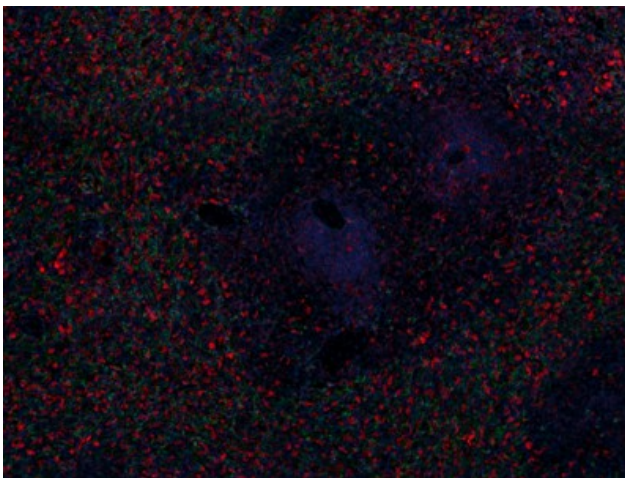
Related Protocols

[Immunohistochemistry Protocol for Paraffin-Embedded Sections](#)

Other Formats

Purified anti-human CD4 Antibody, Spark YG™ 570 anti-human CD4

Product Data



Human paraffin-embedded spleen tissue slices were prepared with a standard protocol of deparaffinization and rehydration. Antigen retrieval was done with Citrate buffer 1X pH 6.0 at 95°C for 40 minutes. Tissue was washed with PBS/0.05% Tween-20 twice for five minutes and blocked with 5% FBS and 0.2% gelatin for 30 minutes. Then, the tissue was stained with 10 µg/mL of anti-human CD4 (clone A17070D) Spark YG™ 570 (red) and anti-human CD8a (clone C8/144B) Alexa Fluor® 647 (green) at 4°C overnight. Nuclei were counterstained with DAPI (blue).

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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587