

ARG65860 anti-CD4 antibody [SQab1714]

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Recombinant Rabbit Monoclonal antibody [SQab1714] recognizes CD4
Tested Reactivity	Hu
Tested Application	FACS, IHC-P, IP, WB
Host	Rabbit
Clonality	Monoclonal
Clone	SQab1714
Isotype	IgG
Target Name	CD4
Species	Human
Immunogen	Synthetic peptide around aa. 200-400 of Human CD4.
Conjugation	Un-conjugated
Alternate Names	CD4mut; CD antigen CD4; T-cell surface glycoprotein CD4; T-cell surface antigen T4/Leu-3

Application Instructions

Application table	Application	Dilution
	FACS	1:10 - 1:50
	IHC-P	1:500 - 1:2000
	IP	1:50
	WB	1:500 - 1:5000

Application Note IHC-P: Antigen Retrieval: Boil tissue section in Tris/EDTA buffer (pH 9.0).
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

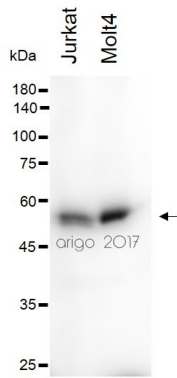
Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.01% Sodium azide, 40% Glycerol and 0.05% BSA.
Preservative	0.01% Sodium azide
Stabilizer	40% Glycerol and 0.05% BSA
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

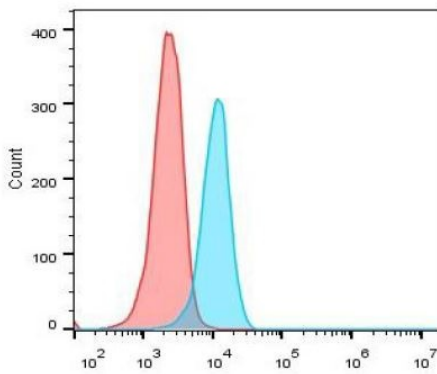
Bioinformation

Database links	GeneID: 920 Human Swiss-port # P01730 Human
Gene Symbol	CD4
Gene Full Name	CD4 molecule
Background	CD4 is a membrane glycoprotein of T lymphocytes that interacts with major histocompatibility complex class II antigens and is also a receptor for the human immunodeficiency virus. This gene is expressed not only in T lymphocytes, but also in B cells, macrophages, and granulocytes. It is also expressed in specific regions of the brain. The protein functions to initiate or augment the early phase of T-cell activation, and may function as an important mediator of indirect neuronal damage in infectious and immune-mediated diseases of the central nervous system. Multiple alternatively spliced transcript variants encoding different isoforms have been identified in this gene. [provided by RefSeq, Aug 2010]
Function	CD4 is an integral membrane glycoprotein that plays an essential role in the immune response and serves multiple functions in responses against both external and internal offenses. In T-cells, functions primarily as a coreceptor for MHC class II molecule:peptide complex. The antigens presented by class II peptides are derived from extracellular proteins while class I peptides are derived from cytosolic proteins. Interacts simultaneously with the T-cell receptor (TCR) and the MHC class II presented by antigen presenting cells (APCs). In turn, recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex. LCK then initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of T-helper cells. In other cells such as macrophages or NK cells, plays a role in differentiation/activation, cytokine expression and cell migration in a TCR/LCK-independent pathway. Participates in the development of T-helper cells in the thymus and triggers the differentiation of monocytes into functional mature macrophages. [UniProt]
Highlight	Related Antibody Duos and Panels: ARG30302 T-cell infiltration Antibody Duo ARG30334 Tumor-infiltrating Lymphocyte Antibody Panel Related products: CD4 antibodies ; CD4 ELISA Kits ; CD4 Duos / Panels ; Anti-Rabbit IgG secondary antibodies ; Related news: More effective cocktail therapy for cancer immune evasion Tumor-Infiltrating Lymphocytes (TILs) New antibody panels and duos for Tumor immune microenvironment
Research Area	Developmental Biology antibody; Immune System antibody; Regulatory T cells Study antibody; T-cell infiltration Study antibody; Tumor-infiltrating Lymphocyte Study antibody
Calculated Mw	51 kDa
PTM	Palmitoylation and association with LCK contribute to the enrichment of CD4 in lipid rafts.



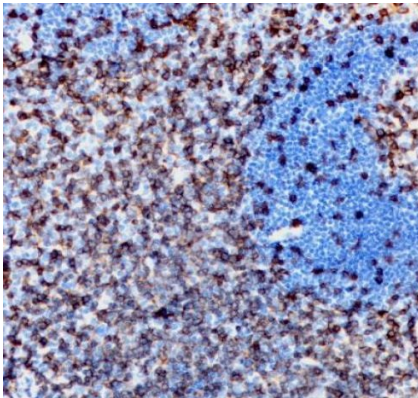
ARG65860 anti-CD4 antibody [SQab1714] WB image

Western blot: 30 µg of Jurkat and Molt4 cell lysates stained with ARG65860 anti-CD4 antibody [SQab1714] at 1:500 dilution.



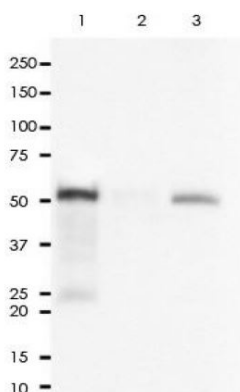
ARG65860 anti-CD4 antibody [SQab1714] FACS image

Flow Cytometry: Jurkat cells were fixed with 4% paraformaldehyde for 10 min. The cells were then stained with ARG65860 anti-CD4 antibody [SQab1714] (blue) at 1:50 dilution in 1x PBS/1% BSA for 30 min at room temperature, followed by Alexa Fluor® 488 labelled secondary antibody. Unlabelled sample (red) was used as a control.



ARG65860 anti-CD4 antibody [SQab1714] IHC-P image

Immunohistochemistry: Formalin/PFA-fixed and paraffin-embedded sections of Human tonsil tissue stained with ARG65860 anti-CD4 antibody [SQab1714] at 1:2000 dilution. Antigen Retrieval: Boil tissue section in Tris/EDTA buffer (pH 9.0).



ARG65860 anti-CD4 antibody [SQab1714] IP image

Immunoprecipitation: 0.4 mg of Molt-4 whole cell lysate was immunoprecipitated (1:50 dilution) and stained with ARG65860 anti-CD4 antibody [SQab1714].

Lane 1: Immunoprecipitation in Molt-4 whole cell lysate
 Lane 2: Rabbit IgG instead of Primary Ab in Molt-4 whole cell lysate
 Lane 3: Molt-4 whole cell lysate, 10 µg (input)