

CD4 (T-Helper/Inducer Cell Marker) Antibody

Mouse Monoclonal Antibody [Clone CD4/7141]

Catalog No	Format	Size
920-MSM11-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
920-MSM11-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
920-MSM11-P1ABX	Purified Ab WITHOUT BSA or Azide at 1.0mg/ml	100 ug

Applications	Tested Dilution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

Clone	CD4/7141
Immunogen	Recombinant human CD4 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b / Kappa
Mol. Weight of Antigen	51.11kDa
Cellular Localization	Cell membrane
Species Reactivity	Human
Positive Control	Highly expressed in T-helper cells

**Optimal dilution for a specific application should be determined.*

Product Images for CD4 (T-Helper/Inducer Cell Marker) Antibody

Specificity & Comments

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., (Microbial infection) Primary receptor for human immunodeficiency virus-1 (HIV-1) (PubMed:12089508, PubMed:16331979, PubMed:2214026, PubMed:9641677). Down-regulated by HIV-1 Vpu (PubMed:17346169). Acts as a receptor for Human Herpes virus 7/HHV-7 (PubMed:7909607).

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.