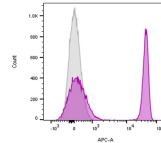


CD4 Monoclonal Mouse Antibody (EDU-2)



Product Description

Recognizes a protein of 55 kDa, identified as CD4. It 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 protein 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. This MAb was characterized as human CD4 antibody at II and IV International Workshop on Human Leukocyte Differentiation Antigens. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. Reinberz EL et al. eds. Leukocyte Typing II, Springer-Verlag, Berlin, 1985.
2. Knapp W. et al. (eds) Leukocyte Typing IV, p314-330, Oxford University Press, Oxford, 1989.
3. Immunol Cell Biol (2015) 93: 396-405. (functional studies; binding site identification)

Product attributes

Antibody number	#0345
Antibody reactivity (target)	CD4
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	EDU-2
Isotype	IgG2a, kappa
Molecular weight	55 kDa
Synonyms	L3T4; Leu3; Ly-4; Lymphocyte antigen CD4; p55; T cell antigen T4/LEU3; T cell differentiation antigen L3T4; T-cell surface antigen T4/Leu-3; T-cell surface glycoprotein CD4
Human gene symbol	CD4
Entrez gene ID	920
SwissProt	P01730
Unigene	631659
Immunogen	Stimulated human leukocytes
Antibody target cellular localization	Plasma membrane
Verified antibody applications	Flow (surface) (verified), IF (verified), IHC (frozen) (verified)
Species reactivity	Chimpanzee, Human, Macaca arcoides, Orangutan
Expected antibody applications	Functional studies (published for clone)
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunofluorescence (direct conjugate): 1-5 ug/mL. Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Does not react with Macaca mulatta (rhesus monkey), others not tested. Optimal dilution for a specific application should be determined by user
Positive control	Human peripheral blood mononuclear cells (PBMCs), CCRF-CEM or HL-60. Lymph node or tonsil.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Protect fluorescent conjugates from light. Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody research areas	Immunology
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Cell/tissue expression	Lymphocytes, Myeloid cells

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405
BNC88	CF®488A	490/515	488	GFP, FITC
BNC68	CF®568	562/583	532, 561	RFP, TRITC
BNC94	CF®594	593/614	561	Texas Red®
BNC40	CF®640R	642/662	633-640	Cy®5
BNC47	CF®647	650/665	633-640	Cy®5
BNCB	Biotin	N/A	N/A	N/A
BNUB	Purified	N/A	N/A	N/A
BNUM	Purified, BSA-free	N/A	N/A	N/A

Dye Features

[CF®405S Features](#)

[CF®488A Features](#)

[CF®568 Features](#)

[CF®594 Features](#)

[CF®640R Features](#)

[CF®647 Features](#)

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