

Novocastra™ Lyophilized Mouse Monoclonal Antibody CD3

Product Code: NCL-CD3

Intended Use	FOR RESEARCH USE ONLY.
Specificity	Human CD3 antigen composed of 22/26/30 kD lymphocytes surface molecules associated with the T cell antigen receptor complex.
Clone	UCHT1
Ig Class	IgG1
Antigen Used for Immunizations	Human infant thymocytes and lymphocytes from a patient with Sezary disease.
Hybridoma Partner	Mouse myeloma (P3.X63 Ag8.653).
Preparation	Lyophilized tissue culture supernatant containing 15 mM sodium azide. Reconstitute with 1 mL or 0.1 mL of sterile distilled water as indicated on vial label.
Effective on Frozen Tissue	Yes
Effective on Paraffin Wax Embedded Tissue	No
Recommendations on Use	Immunohistochemistry: Typical working dilution 1:100–1:200. 60 minutes primary antibody incubation at 25 °C. Standard ABC technique. Also effective in indirect flow cytometry. Western Blotting: Not recommended.
Positive Controls	Immunohistochemistry: Tonsil.
Staining Pattern	Membrane.
Storage and Stability	Store unopened lyophilized antibody at 4 °C. Under these conditions, there is no significant loss in product performance up to the expiry date indicated on the vial label. The reconstituted antibody is stable for at least two months when stored at 4 °C. For long term storage, it is recommended that aliquots of the antibody are frozen at -20 °C (frost-free freezers are not recommended). Repeated freezing and thawing must be avoided. Prepare working dilutions on the day of use.
General Overview	The CD3 molecule consists of five different polypeptide chains with molecular weights ranging from 16 to 28 kD. The five chains are designated gamma, delta, epsilon, zeta and eta. The CD3 complex is closely associated at the lymphocyte cell surface with the T cell antigen receptor (TCR). It is believed that the CD3 complex is involved in signal transduction to the T cell interior following antigen recognition. The CD3 antigen is first detectable in early thymocytes and its appearance probably represents one of the earliest signs of commitment to the T cell lineage.
General References	Chetty R and Gatter K. <i>Journal of Pathology</i> . 173: 303–307 (1994). Clark E A, Ledbetter J A. <i>Immunology Today</i> . 10: 225–228 (1989). Clevers H, Alarcon B, Wileman T, et al.. <i>Annual Review of Immunology</i> . 6: 629–662 (1988). Clevers H, Dunlap S, Terhorst C. <i>European Journal of Immunology</i> . 18: 705–710 (1988). Campana D, Thompson J S Amlot P, et al.. <i>Journal of Immunology</i> . 138: 648–655 (1987). Denning S M, Tuck D T, Singer K H, et al.. In: McMichael A J, et al., eds. <i>Oxford-New York-Tokyo</i> . Oxford University Press. 144–147 (1987). Meuer S C, Acuto O, Hussey R E, et al.. <i>Nature</i> . 303: 808–810 (1983). Beverly P C L and Callard R E. <i>European Journal of Immunology</i> . 11: 329–334 (1981).

