

MONOCLONAL ANTIBODY CD29

Cat. No.	Form	Quantity	Presentation
0790	Purified	100 tests	Liquid 2 ml
0791	FITC	100 tests	Liquid 2 ml
1151	Purified	0.2 mg	Freeze-dried

Clone K20

Isotype IgG2a (mouse)

Immunogen Cells from a T-cell lymphoma.

Hybridoma Myeloma NS1 x Biozzi spleen cells

Specificity The molecular weight of the recognized antigen is 130 kDa.

This antibody recognizes the β chain of the VLA family of dimeric glycoprotein complexes. The 6 different alpha subunits (CD49a to CD49f) of this family are non-covalently associated with the β 1 chain. The antigen revealed by the K20 antibody is preferentially expressed on early haematopoietic cells and on the granulocytic and monocytic lineages. The antigen is also found on T cells, but is not expressed on mature B cells. The antigen is not restricted to haematopoietic lineage but is also expressed in other lineages, particularly epithelial cells.

Applications Flow cytometry

Immunohistochemistry.

Study of CD29/CD4 helper-inducer subset.

Studies of CD3-induced T-cell activation.

Buffer Freeze-dried forms: 1 mg/ml bovine serum albumin in phosphate buffered saline.

Liquid forms: 2 mg/ml bovine serum albumin in phosphate buffered saline containing 0.1% sodium azide.

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Reconstitution and Storage

The freeze-dried form may be stored at 2-8°C until the expiration date. Reconstitute with 1 ml of distilled water. No preservative has been added. The reconstituted form may be stored at -20°C until the expiration date. Aliquotting is suggested to avoid multiple freeze-thaw cycles. The addition of sodium azide at 0.1% (w/v) is recommended for storage of the reconstituted form for up to one month at 2-8°C.

The purified liquid form should be stored at 2 - 8°C.

The conjugated forms should not be frozen and should be stored in the dark at 2 - 8°C.

Recommended Procedures

Fluorescent microscopy or flow cytometry:

Liquid form: 20 μ l/5x10⁵ cells/test

Freeze-dried: 2 μ g/5x10⁵ cells/test

References

1) Amiot, M., Bernard, A., Tran, H.C., Leca, G., Kanellopoulos, J.M. & Boumsell, L. "The human cell surface glycoprotein complex (gp 120,200) recognized by monoclonal antibody K20 is a component binding to phytohaemagglutinin on T cells". 1986, Scand. J. Immunol., **23**, 109-118.

2) Amiot, M., Huet, S., Azogui, O., Dastot, H., Bernard, A. & Boumsell, L. "CDw29 molecules from the monocyte surface are required for CD3-induced T-cell activation". Springer Verlag, 1988, Immunobiology of HLA, vol. II, Immunogenetics and Histocompatibility.

3) Kadagidze, Z.G., Tupitsyn, N.N., Baryshnikov, A.J., Kadyrov, Kh.P., Blinov, V.M., Bernard, A., Amiot, M. and Boumsell, L. "K20 and ICO-10 monoclonal antibodies (gp 120/200; Thy-1); immunophenotyping of human solid tumours". 1990, Br. J. Cancer, **61**.

4) "CDw29 pair B", New clusters and pairs of antibodies, Leucocyte typing III, Oxford 1986, A.J. McMichael Eds., **6**, 52-53.