



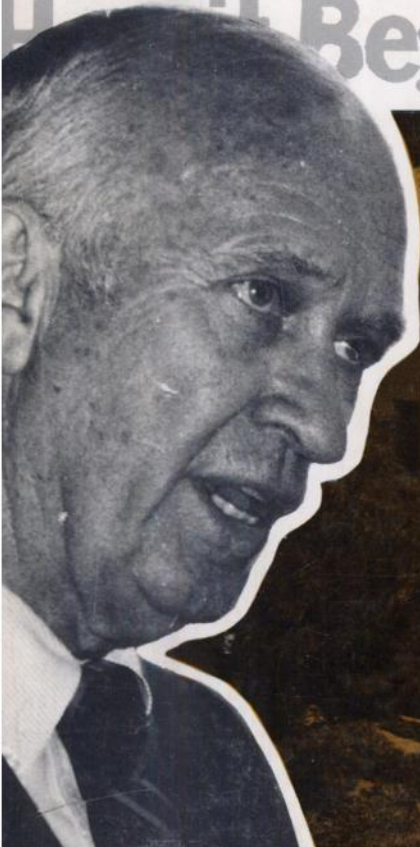
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**NUCLEAR MEDICINE:
How it Began...**



New From Becton Dickinson

Monoclonal Antibodies

Detecting Human Antigens

Now available from Becton Dickinson—purified and well-characterized monoclonal antibodies to human cell surface and serum protein determinants. Select from over 15 new reagents, including antibodies to human IgA subclasses, and human T and B lymphocyte markers. The reagents are provided as purified monoclonal antibodies and, in many

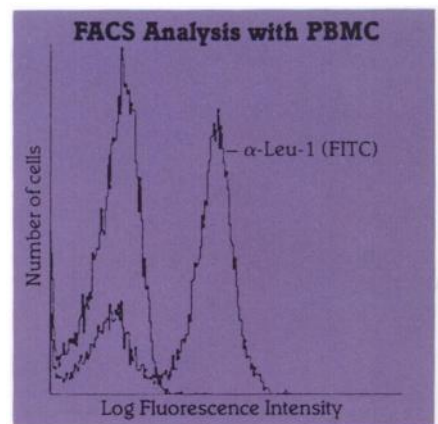
cases, as biotin and fluorescein conjugates.

All Becton Dickinson monoclonal reagents are carefully characterized as to specificity, chain composition, and subpopulation detection. Activity is measured using immunofluorescence staining with Fluorescence Activated Cell Sorter (FACS) analysis or enzyme-linked immuno-

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Monoclonal Antibody	Reactivity with Subpopulations of Human Peripheral Blood Mononuclear Cells (PBMC)			
	TH ₂ ⁺ (¹)	TH ₂ ⁻ (¹)	B	MONOCYTE
Anti-Leu-1 ^(2,3) Clone L17F12				
Anti-Leu-2a ^(4,5) Clone SK1				
Anti-Leu-3a ^(4,5) Clone SK3				
Anti-HLA-DR ⁽⁶⁾ Clone L243				
% of PBMC	20-40%	40-60%	10-20%	10-20%
Subpopulation Contains:	Suppressor and Cytotoxic	Helper and Inducer	Antibody-Forming Cell Precursor	Macrophage Precursor



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Also Available

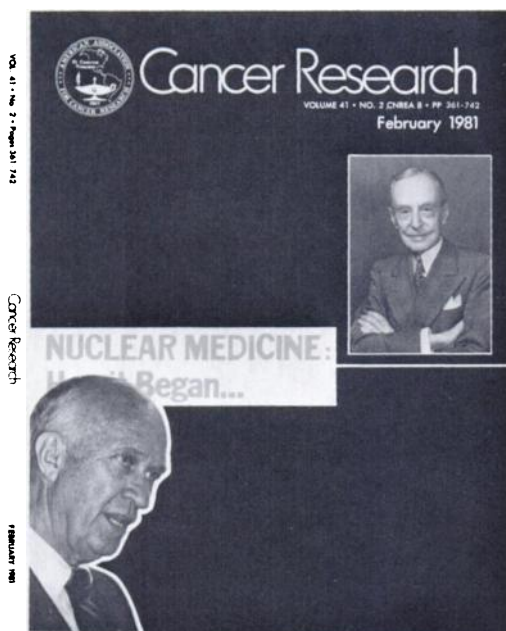
- **Anti-human β₂ microglobulin**⁽⁶⁾ (Clone L368) detects the human cell surface molecule composed of β₂ microglobulin and HLA.
- **Anti-human IgA₁**⁽⁷⁾ (Clone 1-155-1) and **Anti-human IgA₂**⁽⁷⁾ (Clone 14-3-26) distinguish between genetic invariant nonallotypic human IgA subclasses.
- **Anti-mouse monoclonal antibodies** detect various mouse cell surface antigens and immunoglobulins.

For research only. Not for use in human diagnostic or therapeutic procedures.

References:

1. Evans, R.L., Lazarus, H., Penta, A.C., and Schlossman, S.F. (1978). Two functionally distinct subpopulations of human T cells that collaborate in the generation of cytotoxic cells responsible for cell-mediated lympholysis. *J. Immunol.* 120, 1423.
2. Engleman, E.G., Wamke, R., Fox, R.I., and Levy, R. (In press). Studies of a human T lymphocyte antigen recognized by a monoclonal antibody. *PNAS*.
3. Wang, C.Y., Good, R.A., Ammirati, P., Dymbort, G., and Evans, R.L. (1980). Identification of a p69,71 complex expressed on human T cells sharing determinants with B-type chronic lymphatic leukemic cells. *J. Exp. Med.* 151, 1539.
4. Evans, R.L., Wall, D.W., Platsoucas, C.D., Siegal, F.P., Fikrig, S.M., Testa, C.M., and Good, R.A. (In press). Thymus-dependent membrane antigens in man: inhibition of cell-mediated lympholysis by monoclonal antibodies to the TH₂ antigen. *PNAS*.
5. Ledbetter, J.A., Evans, R.L., Lipinski, M., Rundles, C., Good, R.A., and Herzenberg, L.A. (In press). Evolutionary conservation of surface molecules that distinguish T lymphocyte helper/inducer and T cytotoxic/suppressor subpopulations in mouse and man. *J. Exp. Med.*
6. Lampson, L.A. and Levy, R. (1980). Two populations of Ia-like molecules on a human B cell line. *J. Immunol.* 125, 293.
7. Conley, M.E., Kearney, J.F., Lawton III, A.R., and Cooper, M.D. (Nov. 1980). Differentiation of human B cells expressing the IgA subclasses as demonstrated by monoclonal antibodies. *J. Immunol.* 125.

COVER LEGEND



William H. Donner (1864–1953) was born in Indiana. He acquired a large fortune from his investments and developments in natural gas, tin plate, and steel enterprises, becoming president of the Union, Cambria, and Donner Steel Companies.

Donner in 1932 established the International Cancer Research Foundation in memory of his son Joseph, who died of cancer at the age of 34. It became a source of funds during a particularly stringent financial period, and it provided support for many activities in cancer research. The Foundation required that 35%

of its income be spent outside the United States, giving it truly international character. The Foundation extended grants for research and supported a fellowship program and various meetings and publications (e.g., *Index to the Literature of Experimental Cancer Research, 1900–1935*. Philadelphia: Donner Foundation, 1948). Dr. Mildred W. S. Schram (1888–1960) was the executive secretary of the organization (see *Cancer Res.*, 21: 712–713, 1961).

In 1945, the International Cancer Research Foundation was expanded and renamed the Donner Foundation.

Donner was particularly interested in nuclear medicine, and his gifts included the Donner Radiation Laboratory at the University of California at Berkeley in 1941. There, under Dr. John H. Lawrence, brother of Dr. Ernest O. Lawrence, were developed some of the earlier radioisotopic applications to medicine, such as ^{32}P for polycythemia vera (Lawrence, J. H. *Polycythemia. Physiology, Diagnosis and Treatment*. New York: Grune and Stratton, 1955) and the leukemias (Lawrence, J. H. *et al.*, *J. Am. Med. Assoc.*, 136: 672, 1948; and 140: 585, 1949). Ten years later, in 1951, a Donner Laboratory for biological research was established at McGill University, Montreal, Canada.

We are indebted to the Donner Foundation, Philadelphia, for the portrait of W. H. Donner, and to Dr. John H. Lawrence for his photograph and the photograph of the Donner Laboratory at the University of California at Berkeley.

M. B. S.