TO:    Investigator

FROM:  David R. Soll, Director

In any publications that result from the use of the sm 1.2 antibody, Dr. Van Wyk requests that the following acknowledgment statement be used:

“The sm 1.2 antibody was a gift of Drs. Judson J. Van Wyk and Louis E. Underwood of the University of North Carolina and obtained through the Developmental Studies Hybridoma Bank.”

Thank you for your cooperation.
INVESTIGATOR
Name: Judson J. Van Wyk, Louis E. Underwood
Address: Department of Pediatrics, 509 Clinical Sciences Bldg., University of North Carolina, Chapel Hill, NC 27514

IMMUNOGEN
Substance
Name: somatomedin-C/insulin-like growth factor I (Sm-C/IGF-I)
Origin: human plasma
Chemical Composition: polypeptide
Developmental Stage

IMMUNIZATION PROTOCOL
Donor Animal
Species: mouse
Strain: BALB/c
Sex: male
Organ and tissue: spleen lymphocytes
Immunization
Dates immunized: 12/16/82 - 5/25/83
Amount of antigen: 80 µg Sm-C/IGF-I: mouse albumin conjugate + 35 µg free Sm-C/IGF-I in thigh muscles; boosted at 6 wk intervals. Final injection i.p. without adjuvant 4 days before sacrifice.
Adjuvant: Freund’s complete initially and incomplete thereafter

FUSION
Date: before fusion splenocytes of a hyperimmunized mouse were grown for 5 days in vitro in thymocyte-conditioned media in the presence of 15 µg of pure Sm-C/IGF-I

Myeloma cell line
Species: mouse
Designation: P3X63Ag8.653

MONOCLONAL ANTIBODY
Isotype: IgG1, kappa
Specificity
Cell binding: demonstrated in Sertoli cells, testicular peritubular cells, brain cells, liver cells and many other cell types.
Immunohistology
Antibody competition: cross-reacts with IGF-II but not other peptide hormones
Species Specificity: cross-reacts with human, rat, mouse, and possibly chick; occasional difficulty neutralizing rat somatomedin due to binding protein interference

ANTIGEN
Chemical properties: 70 amino acids; 3 S-S bonds; pI~8.4
Molecular weight: 7.5 kDa
Characterization
Immunoprecipitation: single band in Western blot with polyclonal Ab
Immunoblotting: single band on PAGE with silver stain
Purification: Klapper et al., Endocrinology (1983). 112, 2215-2217

FUNCTIONAL EFFECTS: promotes cell replication and differentiation in wide variety of in vitro systems

PUBLICATIONS:

(Continued)


ACKNOWLEDGMENTS STATEMENT

We have been asked by NICHD to ensure that all investigators include an acknowledgment in publications that benefit from the use of the DSHB's products. We suggest that the following statement be used:

“The (select: hybridoma, monoclonal antibody, or protein capture reagent,) developed by [Investigator(s) or Institution] was obtained from the Developmental Studies Hybridoma Bank, created by the NICHD of the NIH and maintained at The University of Iowa, Department of Biology, Iowa City, IA 52242.”

Please send copies of all publications resulting from the use of Bank products to:

Developmental Studies Hybridoma Bank
Department of Biology
The University of Iowa
028 Biology Building East
Iowa City, IA 52242