fluorescein

INVESTIGATOR
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IMMUNOGEN
Substance  fluorescein
Name       fluorescein (I) keyhole limpet hemocyanin (highly substituted)
Origin     hapten = fluorescein; protein carrier = keyhole limpet hemocyanin
Chemical Composition fluorescein isothiocyanate (isomer I)
Developmental Stage

IMMUNIZATION PROTOCOL
Donor Animal
Species    mouse
Strain     BALB/c
Sex        female
Organ and tissue lymphocyte (spleenocyte)
Immunization
Dates immunized not sure – early 1980s
Amount of antigen ~100 µg several times with 3 week intervals, 4-4-20 is a hyperimmune antibody
Route of immunization intraperitoneal
Adjuvant   Complete Freund’s adjuvant (emulsion)

FUSION
Date       early 1980s
Myeloma cell line BALB/c Sp2/0 – Ag 14
Species    BALB/c Sp2/0 – Ag 14
Designation 4-4-20-P1E112-F9 and 4-4-20-P2C4 (two different clones of the same monoclonal antibody)

MONOCLONAL ANTIBODY
Isotype    IgG2a
Specificity anti- fluorescein (hapten)
Cell binding
Immunohistology
Antibody competition
Species Specificity specific for fluorescein, will not react with other fluorescent compounds such as rhodamine

ANTIGEN
Chemical properties hapten (highly fluorescent compound)
Molecular weight 400 kDa
Characterization
Immunoprecipitation
Immunoblotting
Purification
Amino acid sequence analysis
Functional effects
Immunohistochemistry

PUBLICATIONS:
Fluorescein Hapten: An Immunological Probe by Edward W. Voss, CRC Press (1984). This reference serves as a good review of the anti- fluorescein system. Perhaps 100 journal articles were written over the course of 20 years with Edward W. Voss as the principal investigator. The entire amino acid sequence of the Fab fragment has been published and the structure of the antibody solved by crystallization to about 3.0 angstroms.
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
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