INVESTIGATOR
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IMMUNOGEN
Substance
Name proinsulin
Origin human
Chemical Composition recombinant human proinsulin coupled to bovine thyroglobulin

Developmental Stage

IMMUNIZATION PROTOCOL
Donor Animal
Species mouse
Strain BALB/c
Sex female
Organ and tissue spleen
Immunization
Dates immunized 0, 41, 77, 110
Amount of antigen 40µg, 50µg, 5-10µg and 5-10 µg
Route of immunization multiple s.c. injections in the back
Adjuvant CFA (1st), and IFA (2nd + 3rd)

FUSION
Date 1982
Myeloma cell line
Species mouse
Designation SP2/0-Ag14

MONOCLONAL ANTIBODY
Isotype IgG1
Specificity
Cell binding human and monkey pancreas
Immunohistology binds to B-C junction of proinsulin – not competing with GN-ID4 binding to C-peptide moiety
Antibody competition human and monkey proinsulin; does not cross-react to insulin nor C-peptide; cross reaction to rodent proinsulins require aldehyde fixation

ANTIGEN
Chemical properties proinsulin (recombinant, purified)
Molecular weight 9.6 kDa
Characterization
Immunoprecipitation yes
Immunoblotting yes
Purification yes
Amino acid sequence analysis

Functional effects proinsulin is processed to insulin and C-peptide before secretion
Immunohistochemistry antibody stains only intact, non-processed proinsulin found in the immature secretory granules of islet β-cells

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:

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