

AD-A181 188

DESIGN AND SYNTHESIS OF OXYGEN-BINDING HEME PEPTIDES
(U) BAYLOR COLL OF MEDICINE HOUSTON TX H Z ATASSI
30 OCT 86 N00014-85-K-0585

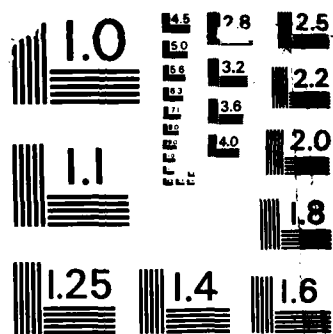
1/1

UNCLASSIFIED

F/G 6/1

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

DTIC FILE COPY

DTIC ELECTE

REPORT DOCUMENTATION PAGE

JUN 8 1987

AD-A181 188

1b. RESTRICTIVE MARKING
NA

3. DISTRIBUTION / AVAILABILITY OF REPORT

Distribution Unlimited

2b. DECLASSIFICATION / DOWNGRADING SCHEDULE
NA

4. PERFORMING ORGANIZATION REPORT NUMBER(S)

Baylor College of Medicine #1

5. MONITORING ORGANIZATION REPORT NUMBER(S)

NA

6a. NAME OF PERFORMING ORGANIZATION

Baylor College of Medicine

6b. OFFICE SYMBOL
(If applicable)
NA

7a. NAME OF MONITORING ORGANIZATION

Office of Naval Research

6c. ADDRESS (City, State, and ZIP Code)

One Baylor Plaza
Houston, Texas 77030

7b. ADDRESS (City, State, and ZIP Code)

800 N. Quincy St.
Arlington, VA 22217-5000

8a. NAME OF FUNDING / SPONSORING ORGANIZATION
Office of Naval Research

8b. OFFICE SYMBOL
(If applicable)
ONR

9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER

(N00014-85-K-0585)

8c. ADDRESS (City, State, and ZIP Code)

800 N. Quincy St.
Arlington, VA 22217-5000

10. SOURCE OF FUNDING NUMBERS

PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION NO.
61153 N	PR04108	441C8	

11. TITLE (Include Security Classification)

Design and Synthesis of Oxygen-Binding Heme Peptides

12. PERSONAL AUTHOR(S)
M.Z. Atassi

13a. TYPE OF REPORT
Annual

13b. TIME COVERED
FROM 10/1/85 TO 9/30/86

14. DATE OF REPORT (Year, Month, Day)
October 30, 1986

15. PAGE COUNT
2

16. SUPPLEMENTARY NOTATION

None

17. COSATI CODES		
FIELD	GROUP	SUB-GROUP
08		

18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)

Heme peptides, synthetic peptides, oxygen-binding, cyanide antidote, blood transfusion

19. ABSTRACT (Continue on reverse if necessary and identify by block number)

In the first 3 months of the first budget year, we recruited and obtained the reagents and supplies for the performance of the research. The following peptides have now been synthesized and are being purified. These peptides represent alternative designs mimicking the heme cavity of myoglobin and the α and β chains of human hemoglobin.

- 61 65 71 86 93 99
1. (C).L.K.K.H.G.V.T.V.L.T.A.(G).L.K.P.L.A.Q.S.H-I 22 residues
- 61 65 70 75 86 99
2. (C).L.K.K.H.G.V.T.V.L.T.A.L.G.A.I.(G).L.K.P.L.A.Q.S.H.A.T.K.H.K.I. 31 residues

(continued on reverse)

20. DISTRIBUTION / AVAILABILITY OF ABSTRACT
 UNCLASSIFIED / UNLIMITED SAME AS RPT. DTIC USERS

21. ABSTRACT SECURITY CLASSIFICATION
(U)

22a. NAME OF RESPONSIBLE INDIVIDUAL
Dr. J.A. Maide

22b. TELEPHONE (Include Area Code)
(202) 696-4055

22c. OFFICE SYMBOL
ONR

3. 61 65 71 86 90 95 99
 (C).L.K.K.H.G.V.T.V.L.T.A.(G).L.K.P.L.A.Q.S.H.A.T.K.H.K.I 27 residues
4. 55 60 65 80 87 93
 (C).V.K.G.H.G.K.K.V.A.D.A.(G).L.S.A.L.S.D.L.H-V 22 residues
5. 55 60 65 69 80 85 90 93
 (C).V.K.G.H.G.K.K.V.A.D.A.L.T.N.A.(G).L.S.A.L.S.D.L.H.A.H.K.L.R.V. 31 residues
6. 65 85 85 90 93
 (C).V.K.G.H.G.K.K.V.A.D.A.(G).L.S.A.L.S.D.L.H.A.H.K.L.R.V. 27 residues
7. 60 65 70 85 92 98
 (C).V.K.A.H.G.K.K.V.L.G.A.(G).F.A.T.L.S.E.L.H-V 22 residues
8. 60 65 70 74 85 90 95 98
 V.K.A.H.G.K.K.V.L.G.A.F.S.D.G.(G).F.A.T.L.S.E.L.H.C.D.K.L.H.V 30 residues
9. 60 98
 (C).V-----A-----V 31 residues
10. 60 65 70 85 90 95 98
 V.K.A.H.G.K.K.V.L.G.A.(G).F.A.T.L.S.E.L.H.C.D.K.L.H.V. 26 residues
11. 60 98
 (C).V-----A-----V 27 residues

During the second budget year, additional peptides outlined in the proposal will be synthesized. All three peptides will be purified and their binding properties studied.

Requested For
 A&I
For Mr. Matthews
6/8/87

Approved
 Date
 Initial

A-1



END

7-87

DTIC