

# SEQUENCE LISTING

<110> University College Cardiff Consultants Limited

<120> Cancer-specific T-cell Receptors

<130> 0290P/WO

<150> GB1810358.0

<151> 2018-06-25

<160> 86

<170> PatentIn version 3.5

<210> 1

<211> 17

<212> PRT

<213> Homo sapiens

<400> 1

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|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | Thr | Ser | Asp | Arg | Gly | Gln | Gly | Ala | Asn | Trp | Asp | Glu | Gln | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

Phe

<210> 2

<211> 13

<212> PRT

<213> Homo sapiens

<400> 2

|     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | Ser | Thr | Leu | Gly | Gly | Gly | Thr | Glu | Ala | Phe | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |

<210> 3

<211> 15

<212> PRT

<213> Homo sapiens

<400> 3

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ser | Ala | Arg | Asp | Leu | Leu | Ala | Glu | Thr | Tyr | Glu | Gln | Tyr | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |

<210> 4  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 4

Cys Ala Ser Ser Ser Ser Asp Thr Asp Thr Gln Tyr Phe  
1 5 10

<210> 5  
<211> 18  
<212> PRT  
<213> Homo sapiens

<400> 5

Cys Ser Val Glu Gly Ser Leu Gly Arg Ala Leu Arg Ala Asn Glu Gln  
1 5 10 15

Phe Phe

<210> 6  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 6

Cys Ala Thr His Gly Gly Glu Lys Leu Phe Phe  
1 5 10

<210> 7  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 7

Cys Ala Ser Ser Tyr Val Gly Leu Gly Ser Pro Leu His Phe  
1 5 10

<210> 8  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 8

Cys Ser Gly Gln Ala Asn Thr Glu Ala Phe Phe  
1 5 10

<210> 9  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 9

Cys Ala Ser Ser Pro Thr Thr Gly Leu Lys Thr Arg Ser Gly Tyr Thr  
1 5 10 15

Phe

<210> 10  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 10

Cys Ser Glu Gly Ser Pro Tyr Asn Glu Gln Phe Phe  
1 5 10

<210> 11  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 11

Cys Ala Ser Ser Asn Gly Phe His Phe Asn Thr Leu Tyr Phe  
1 5 10

<210> 12  
<211> 13

<212> PRT  
<213> Homo sapiens

<400> 12

Cys Ala Ser Ser Leu Gly Gly Gly Asp Thr Gln Tyr Phe  
1 5 10

<210> 13  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 13

Cys Ala Ser Ser Phe Ala Gly Thr Asp Thr Gln Tyr Phe  
1 5 10

<210> 14  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 14

Cys Ala Ser Ser Leu Gly Glu Gly Ser Pro Gly Glu Leu Phe Phe  
1 5 10 15

<210> 15  
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<400> 15

Cys Ala Ser Ser Gln Glu Pro Asn Trp Asn Thr Glu Ala Phe Phe  
1 5 10 15

<210> 16  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 16

Cys Ala Ser Ser Phe Gln Gly Pro Gly Tyr Gly Tyr Thr Phe

1 5 10

<210> 17  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 17

Cys Ser Ala Arg Asp Thr Thr Trp Gly Leu Glu Gln Tyr Phe  
1 5 10

<210> 18  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 18

Cys Ala Thr Lys Pro Ser Gly Ser Thr Asp Thr Gln Tyr Phe  
1 5 10

<210> 19  
<211> 14  
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<213> Homo sapiens

<400> 19

Cys Ser Ala Arg Asp Glu Gly Ile Gly Tyr Glu Gln Tyr Phe  
1 5 10

<210> 20  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 20

Cys Ala Ser Ser Ser Gly Pro Gly Glu Leu Phe Phe  
1 5 10

<210> 21  
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<213> Homo sapiens

<400> 21

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | Arg | Arg | Thr | Leu | Val | Ile | Val | Arg | Arg | Phe | Tyr | Ser | Gly | Asn |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

|     |     |     |     |
|-----|-----|-----|-----|
| Thr | Ile | Tyr | Phe |
|     |     |     | 20  |

<210> 22

<211> 16

<212> PRT

<213> Homo sapiens

<400> 22

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ser | Ala | Arg | Asp | Leu | Ile | Gly | Ser | Gln | Thr | Tyr | Glu | Gln | Tyr | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

<210> 23

<211> 16

<212> PRT

<213> Homo sapiens

<400> 23

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ser | Ala | Arg | Asp | Pro | Ile | Gly | Thr | Glu | Ser | Tyr | Glu | Gln | Tyr | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

<210> 24

<211> 14

<212> PRT

<213> Homo sapiens

<400> 24

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ser | Ala | Arg | Asp | Arg | Ala | Gly | Arg | Ser | Pro | Leu | His | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     |

<210> 25

<211> 14

<212> PRT

<213> Homo sapiens

<400> 25

Cys Ser Val Glu Glu Ser Ser Gly Ile Tyr Glu Gln Tyr Phe  
1 5 10

<210> 26

<211> 15

<212> PRT

<213> Homo sapiens

<400> 26

Cys Ser Ala Arg Glu Asp Gly Gly Gln Thr Tyr Glu Gln Tyr Phe  
1 5 10 15

<210> 27

<211> 13

<212> PRT

<213> Homo sapiens

<400> 27

Cys Ala Ser Ser Trp Ala Gly Pro Val Glu Gln Tyr Phe  
1 5 10

<210> 28

<211> 13

<212> PRT

<213> Homo sapiens

<400> 28

Cys Ala Ser Ser Ser Gln Gly Arg Ala Glu Gln Tyr Phe  
1 5 10

<210> 29

<211> 14

<212> PRT

<213> Homo sapiens

<400> 29

Cys Ala Ser Ser Ser Arg Asp Ser Leu Tyr Glu Gln Tyr Phe  
1 5 10

<210> 30  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 30

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | Ser | Ser | Leu | Gly | Ile | Ile | Ser | Gly | Gln | Pro | Gln | His | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |

<210> 31  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 31

|     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | Ser | Ser | Asn | Thr | Gly | Gly | Tyr | Thr | Gln | Tyr | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |

<210> 32  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 32

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | Ser | Ser | Gln | Gly | Leu | Leu | Leu | Asp | Asn | Glu | Gln | Phe | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |

<210> 33  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 33

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | Ser | Ser | Ser | Pro | Met | Asp | Ser | Gly | Asp | Thr | Asp | Thr | Gln | Tyr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

Phe

<210> 34  
<211> 13

<212> PRT  
<213> Homo sapiens

<400> 34

|     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | Ser | Ser | Pro | Arg | Ser | Gly | Val | Pro | Gln | His | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |

<210> 35  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 35

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | Ser | Ser | Phe | Val | Arg | Glu | Glu | Gly | Ser | Thr | Asp | Thr | Gln | Tyr |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |     |

Phe

<210> 36  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 36

|     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ser | Ala | Arg | Gly | Thr | Glu | Ser | Tyr | Glu | Gln | Tyr | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |

<210> 37  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 37

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | Ser | Trp | Pro | Gly | Glu | Gly | Phe | Gly | Glu | Thr | Gln | Tyr | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |

<210> 38  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 38

Cys Ser Gly Trp Gly Gln Gly Asp Glu Lys Leu Phe Phe  
1 5 10

<210> 39

<211> 15

<212> PRT

<213> Homo sapiens

<400> 39

Cys Ala Ser Ser Glu Tyr Thr Ser Gly Asn Gln Pro Gln His Phe  
1 5 10 15

<210> 40

<211> 16

<212> PRT

<213> Homo sapiens

<400> 40

Cys Ser Ala Arg Asp Leu Trp Thr Gly Glu Thr Tyr Glu Gln Tyr Phe  
1 5 10 15

<210> 41

<211> 14

<212> PRT

<213> Homo sapiens

<400> 41

Cys Ser Ala Thr Gly Leu Ala Gly Leu Gly Glu Gln Phe Phe  
1 5 10

<210> 42

<211> 15

<212> PRT

<213> Homo sapiens

<400> 42

Cys Ala Thr Ser Asp Leu Gly Thr Gly Val Gly Glu Gln Phe Phe  
1 5 10 15

<210> 43  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 43

Cys Ser Val Gly Pro Gly Ser Thr Gly Glu Leu Phe Phe  
1 5 10

<210> 44  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 44

Cys Ala Ser Ser Pro Thr Gly Glu Lys Leu Phe Phe  
1 5 10

<210> 45  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 45

Cys Ala Ser Ser Gln Glu Gly Gly Thr Trp Gly Asp Gly Tyr Thr Phe  
1 5 10 15

<210> 46  
<211> 20  
<212> PRT  
<213> Homo sapiens

<400> 46

Cys Ala Thr Ser Asp Leu Leu Leu Ala Gly Gly Arg Ser Ser Tyr Asn  
1 5 10 15

Glu Gln Phe Phe  
20

<210> 47

<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 47

Cys Ala Ser Ser Glu Ala Ala Ser Gly Arg Pro Gln Thr Phe  
1 5 10

<210> 48  
<211> 19  
<212> PRT  
<213> Homo sapiens

<400> 48

Cys Ala Thr Ser Asp Ala Thr Ala Gly Thr Ser Gly Ser Leu Tyr Glu  
1 5 10 15

Gln Tyr Phe

<210> 49  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 49

Cys Ala Ser Ser Leu Thr Gly Leu Gly Gln Pro Gln His Phe  
1 5 10

<210> 50  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 50

Cys Ala Ser Ser Pro Ala Val Leu Ser Tyr Glu Gln Tyr Phe  
1 5 10

<210> 51  
<211> 15  
<212> PRT

<213> Homo sapiens

<400> 51

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ser | Ala | Arg | Glu | Ser | Leu | Ala | Glu | Thr | Tyr | Glu | Gln | Tyr | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |

<210> 52

<211> 14

<212> PRT

<213> Homo sapiens

<400> 52

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | Ser | Ser | Pro | Gly | Leu | Thr | Ala | Asn | Val | Leu | Thr | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     |

<210> 53

<211> 14

<212> PRT

<213> Homo sapiens

<400> 53

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | Ser | Ser | Leu | Gly | Leu | Ala | Gly | Asn | Glu | Gln | Tyr | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     |

<210> 54

<211> 14

<212> PRT

<213> Homo sapiens

<400> 54

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | Ser | Ser | Asn | Gly | Phe | His | Phe | Asn | Thr | Gln | Tyr | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     |

<210> 55

<211> 14

<212> PRT

<213> Homo sapiens

<400> 55

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cys | Ala | Ser | Ser | Leu | Gly | Ile | Leu | Thr | Asp | Thr | Gln | Tyr | Phe |
| 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     |

<210> 56  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 56

Cys Ala Ser Ser Phe Gln Pro Val Asp Thr Gln Tyr Phe  
1 5 10

<210> 57  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 57

Cys Ser Ala Ser Glu Gly Ile Gly Gln Pro Gln His Phe  
1 5 10

<210> 58  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 58

Cys Ala Ser Ser Val Ser Gly Gly Glu Gln Phe Phe  
1 5 10

<210> 59  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 59

Cys Ala Thr Ser Asp Arg Gly Gln Gly Ala Asn Trp Asp Glu Gln Phe  
1 5 10 15

Phe

<210> 60  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 60

Cys Ala Ser Thr Leu Gly Gly Gly Thr Glu Ala Phe Phe  
1 5 10

<210> 61  
<211> 15  
<212> PRT  
<213> Homo sapiens

<400> 61

Cys Ser Ala Arg Asp Leu Leu Ala Glu Thr Tyr Glu Gln Tyr Phe  
1 5 10 15

<210> 62  
<211> 13  
<212> PRT  
<213> Homo sapiens

<400> 62

Cys Ala Ser Ser Ser Ser Asp Thr Asp Thr Gln Tyr Phe  
1 5 10

<210> 63  
<211> 18  
<212> PRT  
<213> Homo sapiens

<400> 63

Cys Ser Val Glu Gly Ser Leu Gly Arg Ala Leu Arg Ala Asn Glu Gln  
1 5 10 15

Phe Phe

<210> 64  
<211> 11

<212> PRT  
<213> Homo sapiens

<400> 64

Cys Ala Thr His Gly Gly Glu Lys Leu Phe Phe  
1 5 10

<210> 65  
<211> 14  
<212> PRT  
<213> Homo sapiens

<400> 65

Cys Ala Ser Ser Tyr Val Gly Leu Gly Ser Pro Leu His Phe  
1 5 10

<210> 66  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 66

Cys Ser Gly Gln Ala Asn Thr Glu Ala Phe Phe  
1 5 10

<210> 67  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 67

Cys Ala Ser Ser Pro Thr Thr Gly Leu Lys Thr Arg Ser Gly Tyr Thr  
1 5 10 15

Phe

<210> 68  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 68

Cys Ser Glu Gly Ser Pro Tyr Asn Glu Gln Phe Phe  
1 5 10

<210> 69

<211> 14

<212> PRT

<213> Homo sapiens

<400> 69

Cys Ala Ser Ser Asn Gly Phe His Phe Asn Thr Leu Tyr Phe  
1 5 10

<210> 70

<211> 13

<212> PRT

<213> Homo sapiens

<400> 70

Cys Ala Ser Ser Leu Gly Gly Gly Asp Thr Gln Tyr Phe  
1 5 10

<210> 71

<211> 10

<212> PRT

<213> Homo sapiens

<400> 71

Glu Ala Ala Gly Ile Gly Ile Leu Thr Val  
1 5 10

<210> 72

<211> 10

<212> PRT

<213> Homo sapiens

<400> 72

Leu Leu Leu Gly Ile Gly Ile Leu Val Leu  
1 5 10

<210> 73  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 73

Asn Leu Ser Ala Leu Gly Ile Phe Ser Thr  
1 5 10

<210> 74  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 74

Arg Leu Val Asp Asp Phe Leu Leu Val  
1 5

<210> 75  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 75

Ala Leu Lys Asp Val Glu Glu Arg Val  
1 5

<210> 76  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 76

Ile Thr Ser Ala Ile Gly Val Leu Pro Val  
1 5 10

<210> 77  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 77

Ile Thr Ser Ala Ile Gly Ile Leu Pro Val  
1 5 10

<210> 78

<211> 10

<212> PRT

<213> Homo sapiens

<400> 78

Met Thr Ser Ala Ile Gly Val Leu Pro Val  
1 5 10

<210> 79

<211> 10

<212> PRT

<213> Homo sapiens

<400> 79

Gln Thr Ser Ala Ile Gly Val Leu Pro Val  
1 5 10

<210> 80

<211> 10

<212> PRT

<213> Homo sapiens

<400> 80

Met Thr Ser Ala Ile Gly Ile Leu Pro Val  
1 5 10

<210> 81

<211> 10

<212> PRT

<213> Homo sapiens

<400> 81

Leu Thr Ser Ala Ile Gly Val Leu Pro Val  
1 5 10

<210> 82  
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<400> 82

Ile Thr Ser Gly Ile Gly Val Leu Pro Val  
1 5 10

<210> 83  
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<212> PRT  
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<400> 83

Ile Thr Ser Ala Ile Gly Val Leu Pro Ile  
1 5 10

<210> 84  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 84

Gln Thr Ser Ala Ile Gly Ile Leu Pro Val  
1 5 10

<210> 85  
<211> 10  
<212> PRT  
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<400> 85

Ile Thr Ser Ala Ile Gly Val Leu Phe Val  
1 5 10

<210> 86  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 86

Ala Leu Trp Gly Pro Asp Pro Ala Ala Ala  
1 5 10