

-continued

	165		170		175										
Thr	Val	Phe	Arg	Leu	Leu	Ala	Lys	His	Ser	Arg	Trp	Arg	Trp	Val	Gln
			180					185					190		
Ser	Asn	Ala	Arg	Leu	Ile	Tyr	Arg	Asn	Gly	Arg	Pro				
		195					200								

1. (canceled)
2. (canceled)
3. (canceled)
4. (canceled)
5. (canceled)
6. (canceled)
7. (canceled)
8. (canceled)
9. (canceled)
10. (canceled)
11. (canceled)
12. (canceled)
13. (canceled)
14. (canceled)
15. (canceled)
16. (canceled)
17. (canceled)
18. (canceled)
19. (canceled)
20. (canceled)

21. An isolated and purified polypeptide comprising a DNA binding domain of an Ah receptor protein wherein said DNA binding domain comprises the amino acid sequence of

[RKRRKPVQKTVKPIPAEGIK-SNPSKRHRDRLNTELDRLASLLPFPQD-VINKLDKLSV LRLSVSYLRAKSFFD] SEQ ID NO: 37 and alterations, substitutions and deletions thereof.

22. An isolated and purified polypeptide comprising a DNA binding domain of an Ah receptor protein wherein said DNA binding domain comprises the amino acid sequence of

[RKRRKPVQKTVKPIPAEGIK-SNPSKRHRDRLNTELDRLASLLPFPQD-VINKLDKLSV LRLSVSYLRAKSFFD] SEQ ID NO: 38 and alterations, substitutions and deletions thereof.

23. A chimeric Ah receptor protein wherein the native DNA binding domain of said chimeric protein has been replaced with a non-native DNA binding domain, wherein said DNA binding domain is a fusion protein capable of binding a DNA sequence.

24. The chimeric Ah receptor protein of claim 23 wherein the non-native binding domain is replaced with a DNA binding domain from a LexA protein.

25. The chimeric Ah receptor protein of claim 23 wherein the non-native DNA binding domain is replaced with a DNA binding domain from a Ga14 protein.

26. An isolated and purified polypeptide comprising a DNA binding domain of an Ah receptor protein wherein said DNA binding domain comprises the amino acid sequence of [EFQRQLHWALNPSQCTESGQGIEEAT-GLPQTVVCYNPDQIPPENSPLMERCFCIRLRCLLDNSSGFLAMNFQKLYLH-GQKKKGKDGKGSILPPQLALFAIATPLQPPSILEIR TKN-FIFRTKHKLDFTPIGCDAKGRIV-LGYTEAELCTRGSYGOFIHMDMLYCAESHIRMIKTGESGMIVFRLLTKNNRWTWVQSNARLLYKNGRP] SEQ ID NO:39 and alterations, substitutions, additions and deletions thereof.

27. An isolated and purified polypeptide comprising a ligand binding domain of an Ah receptor protein, wherein said ligand binding domain comprises the amino acid sequence of [FMERCFCRLRCLLDNSSGFLAMNFQRLKYLHGQNKKGKDGALLPPQLALFAIAT PLQPP-SILEIRTKNFIFRTKHKLDFT-PIGCDAKGQLILGYTEVELCTRGSYGOFIHAADILHCAESHIRMIKTGESGMTVFRLLAKHSRWRWVQSNARLIYRNGRP] SEQ ID NO: 40 and alterations, substitutions, additions and deletions thereof.

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