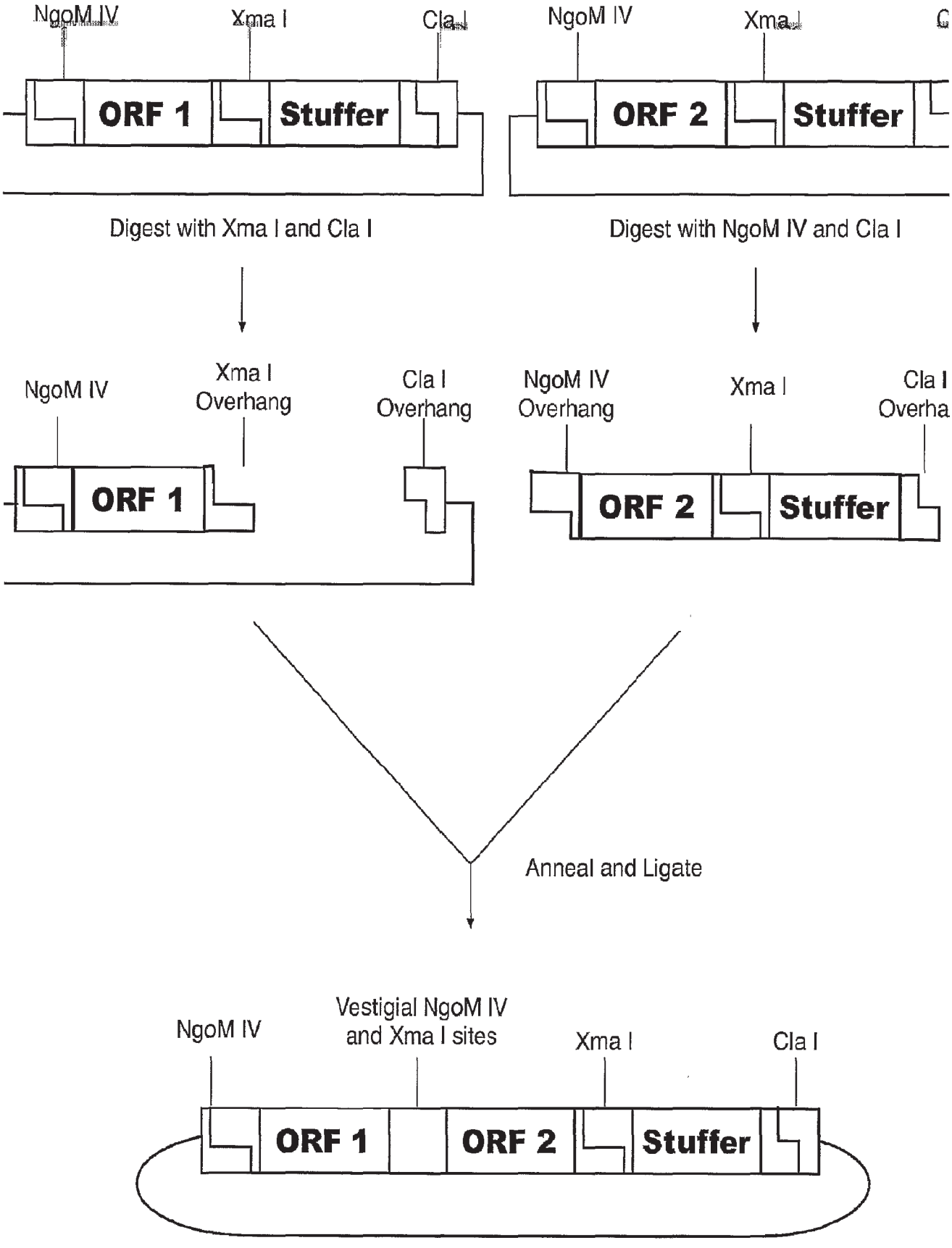
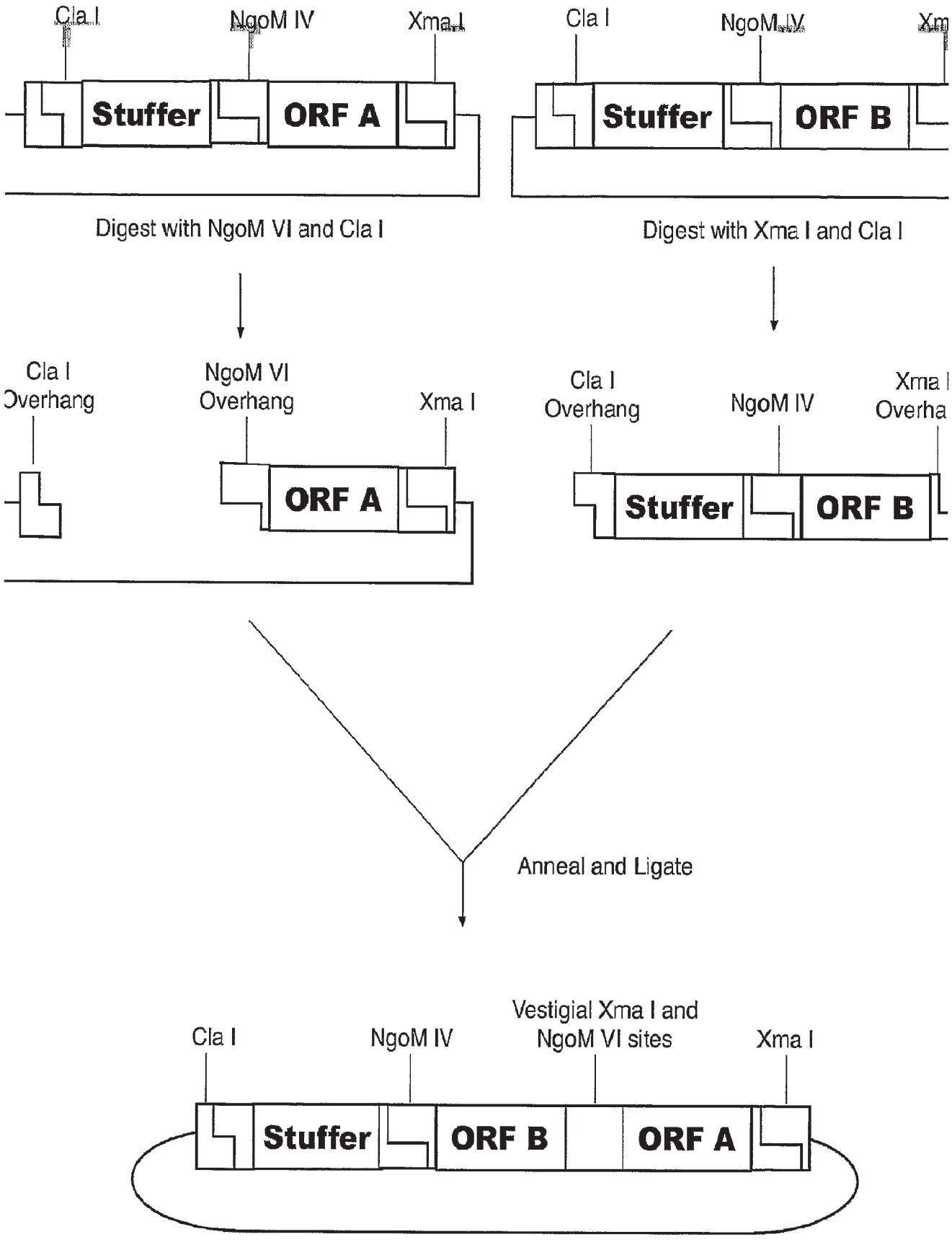
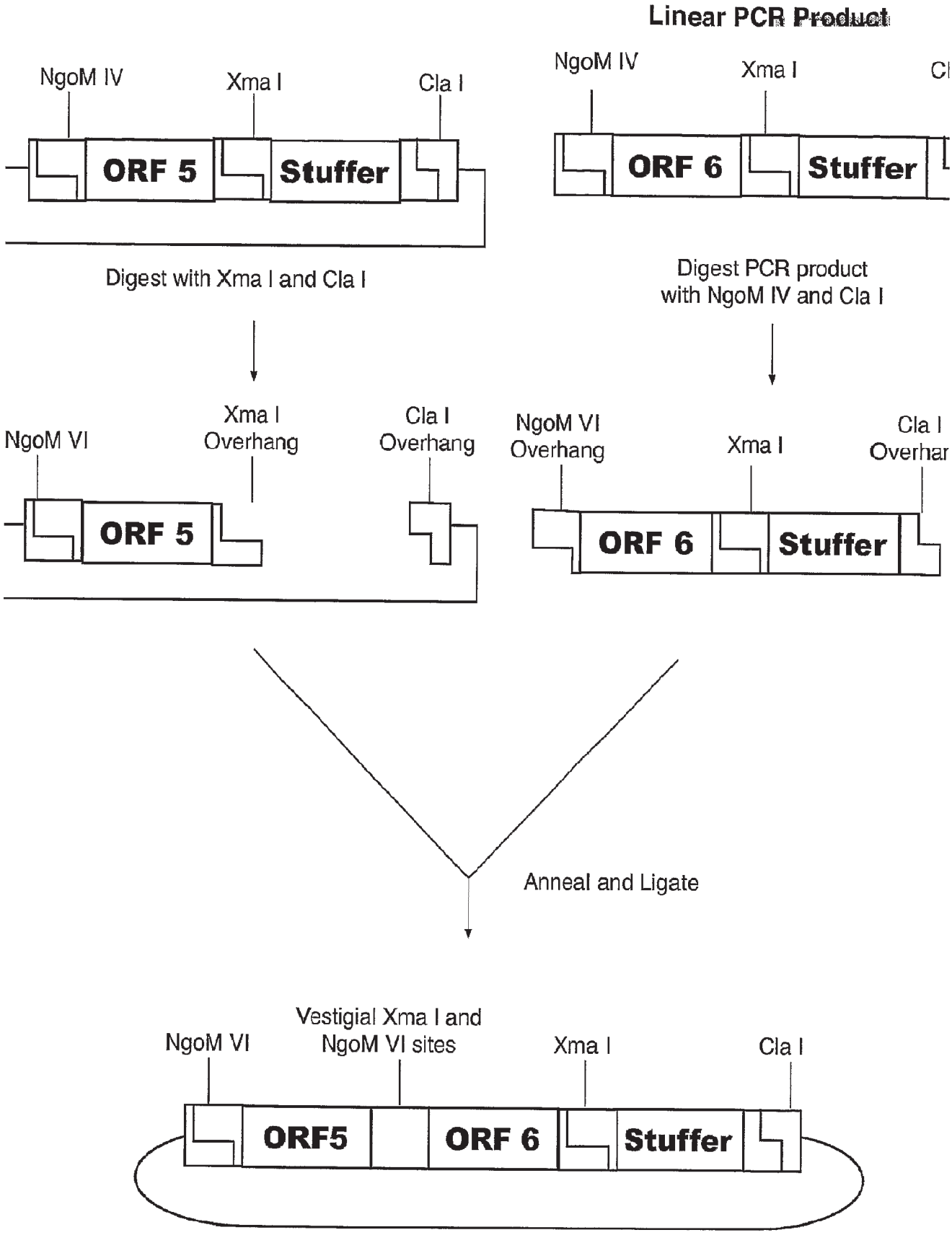

NgoM IV
Xma I
Cla I
ORF 1
Stuffer
NgoM IV
Xma I
ORF 2
Stuffer
Digest with Xma I and Cla I
Digest with NgoM IV and Cla I
NgoM IV
Xma I Overhang
Cla I Overhang
ORF 1
NgoM IV Overhang
Xma I
Cla I Overha
ORF 2
Stuffer
Anneal and Ligate
NgoM IV
Vestigial NgoM IV and Xma I sites
Xma I
Cla I
ORF 1
ORF 2
Stuffer

Figure 1


Cla I
NgoM IV
Xma I
Stuffer
ORF A
Digest with NgoM VI and Cla I
Cla I
Overhang
NgoM VI
Overhang
Xma I
ORF A
Cla I
NgoM IV
Xm
Stuffer
ORF B
Digest with Xma I and Cla I
Cla I
Overhang
NgoM IV
Xma I
Overha
Stuffer
ORF B
Anneal and Ligate
Cla I
NgoM IV
Vestigial Xma I and
NgoM VI sites
Xma I
Stuffer
ORF B
ORF A


Linear PCR Product
NgoM IV
Xma I
Cla I
ORF 5
Stuffer
NgoM IV
Xma I
ORF 6
Stuffer
Digest with Xma I and Cla I
Digest PCR product
with NgoM IV and Cla I
NgoM VI
Xma I
Overhang
Cla I
Overhang
ORF 5
NgoM VI
Overhang
Xma I
Cla I
ORF 6
Stuffer
Anneal and Ligate
Vestigial Xma I and
NgoM VI sites
NgoM VI
Xma I
Cla I
ORF5
ORF 6
Stuffer

Overhang
NgoM VI
Overhang
ORF X
Stuffer
Overhang
Overhang
ORF Z
Xma I
Anneal and Ligate
Cla I
NgoM VI
Vestigial NgoM VI
and Xma I sites
ORF X
Stuffer
ORF Z
Xma I

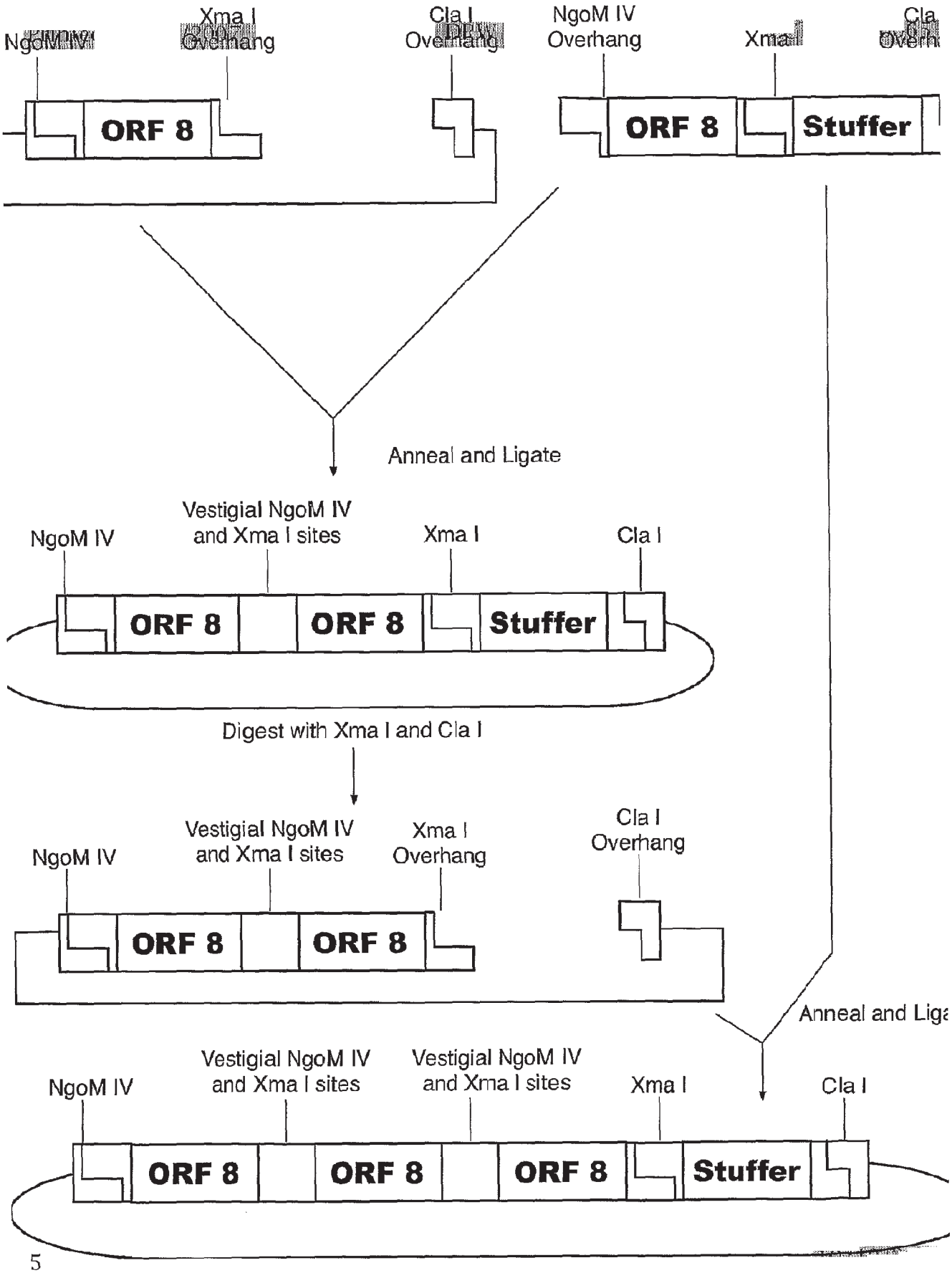

NgoM IV
Xma I Overhang
Cla I Overhang
NgoM IV Overhang
Xma I
ORF 8
ORF 8
Stuffer
Anneal and Ligate
NgoM IV
Vestigial NgoM IV and Xma I sites
Xma I
Cla I
ORF 8
ORF 8
Stuffer
Digest with Xma I and Cla I
NgoM IV
Vestigial NgoM IV and Xma I sites
Xma I Overhang
Cla I Overhang
ORF 8
ORF 8
Anneal and Liga
NgoM IV
Vestigial NgoM IV and Xma I sites
Vestigial NgoM IV and Xma I sites
Xma I
Cla I
ORF 8
ORF 8
ORF 8
Stuffer

FIGURE 6A

FIGURE 6B

FIGURE 6C

Site I	ORF Y	Vestigial Sites	ORF Z	Vestigial Sites	LOCALIZATION SIGNAL	Site II	stuffer	Site III

FIGURE 7A

Site I	LOCALIZATION SIGNAL	Vestigial Sites	PEPTIDE 3	Vestigial Sites	PEPTIDE 4	Vestigial Sites	PEPTIDE 5	Site II	stuffer	Site III

FIGURE 7B

Site I	LIGAND X	Vestigial Sites	LIGAND X	Vestigial Sites	LIGAND X	Vestigial Sites	LOCALIZATION SIGNAL	Site II	stuffer	Site III

FIGURE 7C

FIGURE 8A

FIGURE 8B

FIGURE 8C

Site I	CYTOPLASMIC DOMAIN	Vestigial Sites	TRANSMEMBRANE DOMAIN	Vestigial Sites	EXTRACELLULAR DOMAIN	Site II	stuffer	Site III

FIGURE 9A

Site I	DNA BINDING DOMAIN	Vestigial Sites	HORMONE BINDING DOMAIN	Vestigial Sites	DIMERIZATION DOMAIN	Vestigial Sites	ACTIVATION DOMAIN	Site II	stuffer	Site III

FIGURE 9B

Site I	SUBSTRATE RECOGNITION DOMAIN	Vestigial Sites	CATALYTIC DOMAIN	Vestigial Sites	INHIBITION DOMAIN	Vestigial Sites	BINDING DOMAIN	Site II	stuffer	Site III

FIGURE 9C



FIGURE 10

<---------- Module Open Reading Frame ---------->				
NgoM IV	ORF of interest	Xma I	Stuffer	Cla I
GCCGGC	AAGAAGAAAAAGAAGAAG	CCCGGG	GGCGGAGGC	ATCGAT
AlaGly	LysLysLysLysLysLys	ProGly	GlyGlyGly	IleAsp

FIGURE 11

Site I	Phosphorylation Domain	Site II	Stuffer	Site III

Site I	Zinc Finger Region	Site II	Stuffer	Site III

Site I	Peptide Inhibitor	Site II	Stuffer	Site III

Site I	Hormone Binding Domain	Site II	Stuffer	Site III

Site I	Epitope	Site II	Stuffer	Site III

Site I	Dimerization Domain	Site II	Stuffer	Site III

Site I	Lipid Binding Domain	Site II	Stuffer	Site III

Site I	Glycosylation Domain	Site II	Stuffer	Site III

Site I	Peptide Hormone	Site II	Stuffer	Site III

Site I	Ion Pore Region	Site II	Stuffer	Site III

Site I	Reporter Peptide	Site II	Stuffer	Site III

Site I	Catalytic Domain	Site II	Stuffer	Site III

Site I	DNA Binding Domain	Site II	Stuffer	Site III

Site I	Leucine Zipper Region	Site II	Stuffer	Site III

Site I	Transmembrane Domain	Site II	Stuffer	Site III

Site I	Activation Domain	Site II	Stuffer	Site III

Site I	Inhbition Domain	Site II	Stuffer	Site III

Site I	G Protein Binding Region	Site II	Stuffer	Site III

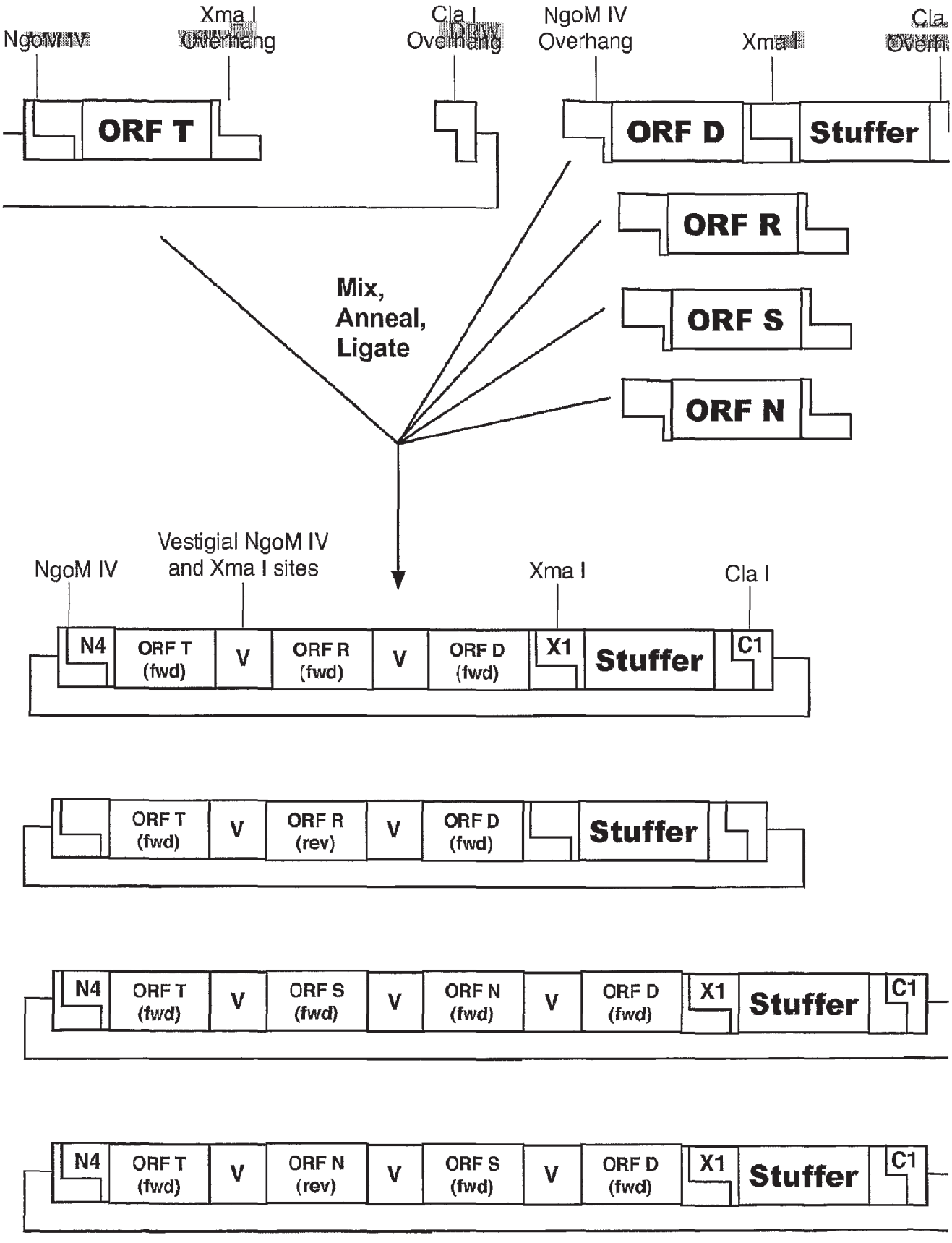
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Site I	Ligand	Site II	Stuffer	Site III

Site I	Protein Subunit	Site II	Stuffer	Site III

Site I	Localization Signal	Site II	Stuffer	Site III

FIGURE 12


NgoM IV
Xma I Overhang
Cla I Overhang
NgoM IV Overhang
Xma I
Cla I
ORF T
ORF D
Stuffer
ORF R
ORF S
ORF N
Mix, Anneal, Ligate
Vestigial NgoM IV and Xma I sites
N4
ORF T (fwd)
V
ORF R (fwd)
ORF D (fwd)
X1
C1
ORF R (rev)
ORF S (fwd)
ORF N (fwd)
ORF N (rev)
ORF S (fwd)

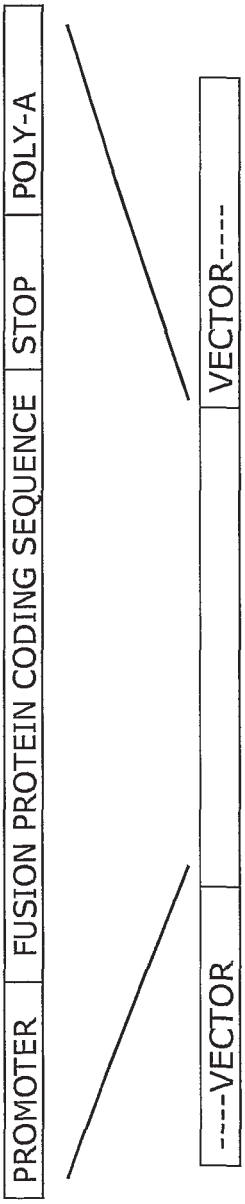


FIGURE 14A

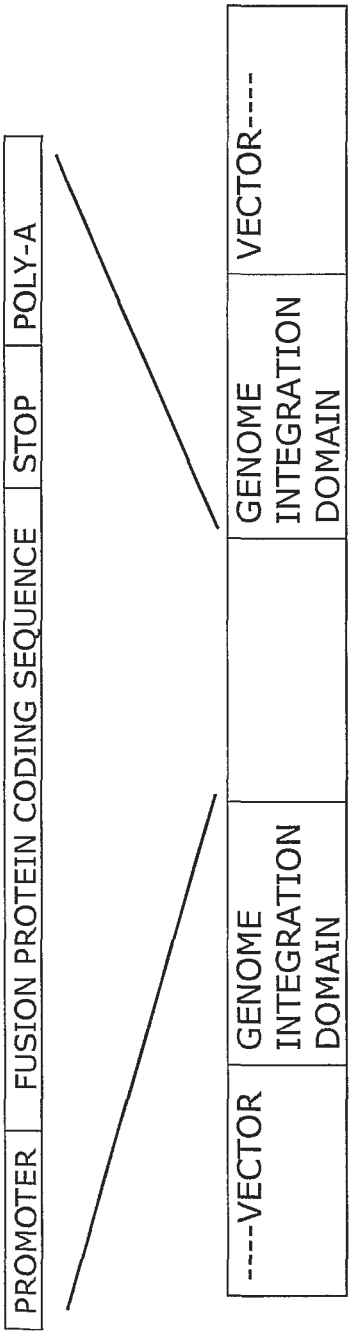


FIGURE 14B

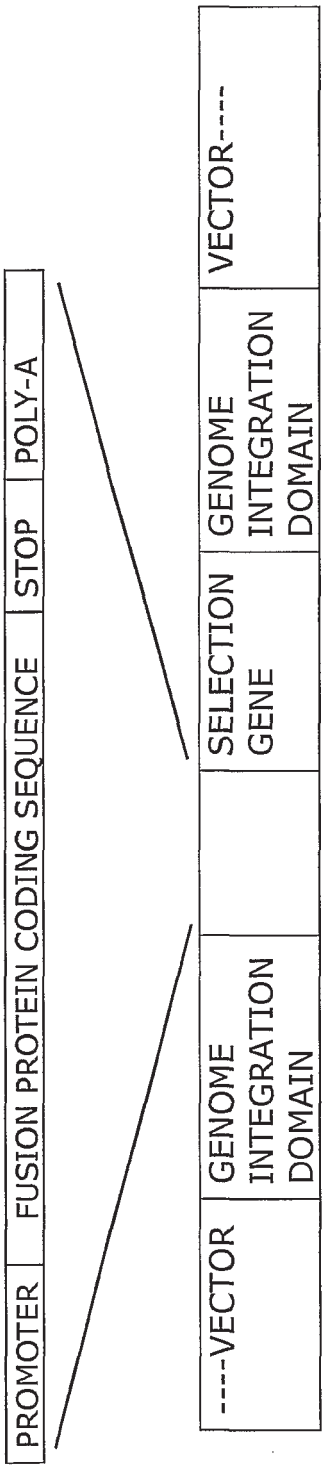


FIGURE 14C

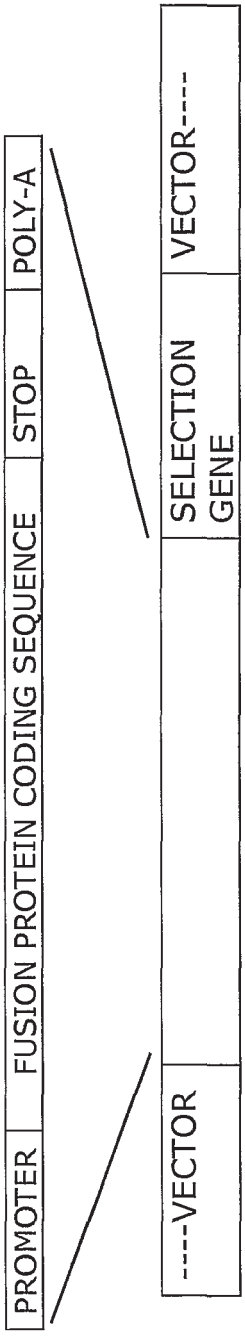


FIGURE 14D

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