

CLAIMS

WHAT IS CLAIMED IS:

1. A polynucleotide encoding
a polypeptide comprising the amino acid sequence of SEQ ID NO: 57, wherein the polypeptide comprises:
a truncated non-immunogenic HER1 polypeptide comprising a HER1 Domain III and a truncated HER1 Domain IV;
a non-HER1 trans-membrane domain; and
a peptide linker that links the truncated HER1 polypeptide to the non-HER1 transmembrane domain.
2. The polynucleotide of claim 1, wherein the truncated non-immunogenic HER1 polypeptide binds an anti-HER1 antibody selected from the group consisting of cetuximab, futuximab, depatuxizumab, imgatuzumab, laprituximab, matuzumab, necitumumab, nimotuzumab, panitumumab and zalutumumab.
3. The polynucleotide of claim 1, wherein the polynucleotide comprises the nucleic acid sequence of SEQ ID NO: 56.
4. A polypeptide comprising the amino acid sequence of SEQ ID NO: 57, wherein the polypeptide comprises: a truncated non-immunogenic HER1 polypeptide comprising a HER1 Domain III and a truncated HER1 Domain IV; a non-HER1 domain; and a peptide linker that links the truncated non-immunogenic HER1 polypeptide to the non-HER1 transmembrane domain.
5. The polypeptide of claim 4, wherein the truncated non-immunogenic HER1 polypeptide binds an anti-HER1 antibody selected from the group consisting of cetuximab, futuximab, depatuxizumab, imgatuzumab, laprituximab, matuzumab, necitumumab, nimotuzumab, panitumumab, and zalutumumab.