

Construct	N	Primer name	AE	Nucleotides (5'-3')	Sequence	Restriction enzymes	Vector
AE2a Δ659 (660-1237)	<b>1</b>	AKS-C-term PXT7 rev	AE2 AE2	2157-2178	5'-CCGGAATTCAAGATTTGCCATG GTAGAGGTGGCAGGTGCAG-3'	<i>EcoRI/BsrGI</i>	PXT7
*AE1 <sub>(1-422)</sub> /AE2 <sub>(704-1237)</sub>	<b>2</b>				(Zhang <i>et al.</i> , 1996)		
AE2 <sub>(1-1119)</sub> /AE1 <sub>(812-929)</sub>	<b>3</b>				N.A. Ligation of restriction fragments	Digest AE2a (PXT7) - <i>BsrGI/XbaI</i> and AE2 <sub>(1-920)</sub> /AE1 <sub>(613-929)</sub> with <i>BsrGI/XbaI</i>	PXT7
AE2 <sub>(1-920)</sub> /AE1 <sub>(613-929)</sub>	<b>4</b>	AE1.F1 T7 AE2.R2 SZ-14	AE1 AE1 AE2 AE2	2922-2942/ 1963-1983 1983-1963/ 2942-2922 2157-2178	5'-CTGCGCAAGTTCAAGAACAGC- ACCTACTTCCCTGGCAAGCTG-3' 5' -TAATACGACTCACTATAGGG – 3' 5'-CAGCTTGCCAGGGAAAGTAGGT- GTTCTTGAACCTGCGCAG-3' 5'-ATGGTAGAGGTGGCAGGTGCAG-3'	Digest AE2a (PXT7) - <i>StuI/SpeI</i> and PCR fragment <i>StuI/AvrII</i>	PXT7
AE2 <sub>(1-920)</sub> /AE1 <sub>(613-811)</sub> /AE2 <sub>(1120-1237)</sub>	<b>5</b>				N.A. Ligation of restriction fragments	Digest AE2a PAX - <i>Sbf/IBsrGI</i> and AE2 <sub>(1-920)</sub> /AE1 <sub>(613-929)</sub> <i>Sbf/IBsrGI</i>	PAX
AE2 <sub>(1-703)</sub> /AE1 <sub>(423-811)</sub> /AE2 <sub>(1120-1237)</sub>	<b>6</b>				N.A. Ligation of restriction fragments	Digest AE2a PAX - <i>Sbf/IBsrGI</i> and *AE2 <sub>cyto</sub> /AE1 <sub>mem</sub> <i>Sbf/IBsrGI</i>	PAX
AE2 <sub>(1-703)</sub> /AE1 <sub>(423-612)</sub> /AE2 <sub>(921-1237)</sub>	<b>7</b>	AE2.F2 SZ-18 AKS2.F4 AE1.R1	AE1 <sub>(1-612)</sub> / AE2 <sub>(921-1237)</sub> AE2 <sub>(1-703)</sub> / AE1 <sub>(423-929)</sub>	1942-1962/ 2943-2963 3876-3896 1557-1577 2943-2963/ 1942-1962	5'-CTACGAAAGTTCAAGAACAGC- CGGTTCTTCCCTGGCCGGATC-3' 5'-CTACACAGGCATGGCATCTC-3' 5'-CCTCATGTCACTGAGCCTCTC-3' 5'-GATCCGCCAGGGAAAGAACCG- GCTGTTCTTGAACCTTCGTAG-3'	Digest AE2a PAX - <i>Sbf/IBsrGI</i> and PCR fragment - <i>Sbf/IBsrGI</i>	PAX
AE1 <sub>(1-612)</sub> /AE2 <sub>(921-1237)</sub>	<b>8</b>	AE2.F2 SZ-18 AE1.RI AE1-F1	AE2a kAE1	1942-1962/ 2943-2963 3876-3896 2943-2963/ 1942-1962 1219-1242	5'-CTACGAAAGTTCAAGAACAGC- CGGTTCTTCCCTGGCCGGATC-3' 5'-CTACACAGGCATGGCATCTC-3' 5'-GATCCGCCAGGGAAAGAACCG- GCTGTTCTTGAACCTTCGTAG-3' 5'-CTAGACTGCTTCATCTACGAG-3'	PCR fragment digested with <i>EcoRV/BsrGI</i> , kAE1 digested with <i>EcoRI/EcoRV</i> and AE2a (PXT7) digested with <i>EcoRI/BsrGI</i>	PXT7
*AE2 <sub>(1-703)</sub> /AE1 <sub>(423-929)</sub>	<b>9</b>				(Zhang <i>et al.</i> , 1996)		
AE1-AE2(EC3)	<b>10</b>	CK-AE1-R1 AE1-F1 CK-AE1-F2 SZ-18	AE1 AE1 AE2 AE2	1794-1818/ 2714-2732 1219-1242 1796-1818/ 2714-2734 3876-3896	5'-GCCATGGAGTGGGTGCTC-CTGG AAAATCTTGATCAGCTGGAG-3' 5'-GCCAAGCCAGACCCAACCTGTAC-3' 5'-CCAAGCTGATCAAGATTTCAG- GAGCACCCACTCCATGGCTG-3' 5'-CTACACAGGCATGGCATCTC-3'	Digest kAE1-pBL and PCR fragment with <i>StuI</i> and <i>SphI</i>	pBL PAX
AE2-AE1(EC3)	<b>11</b>	SZ-26 CK-AE2-R1 AE1.3PR1 CK-AE2-F2	AE2 AE2 AE1 AE1	1819-1835/ 2715-2683 2949-2934 2692-2714/ 1819-1835	5'-TGTGTAGTGGTAGTC-CTGGAAG ATCTTGATCAGCTTATAGAAG-3' 5'-GAAAGTGGAGTGGTTG-3' 5'-ATAAGCTGATCAAGATCTCC AG-GACTACCCACTACAACAG	Digest AE2a PAX and PCR fragment with <i>StuI</i> and <i>BsrgI</i>	PAX pBL

**Supplemental Table 1. Construction of AE chimeras.**