Figure 1

Plasmid Pool # (with Mutation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
No. of Mutations	30	16	15	10	6	6	6	6	7	6	5	5	4	2	2	2	1	2
BRAF	c.1756G>A c.1742A>G c.1774A>G c.1789C>G c.1803A>C	c.1789_1790CT>TC c.1760A>C c.1776A>G c.1803A>T	c.1813_1814AG>TT c.1761C>G c.1796C>T c.1781A>T	c.1797_1799AGT>GAG c.1761C>A c.1781A>G c.1814G>A	c.1798_1799GT>AA c.1782T>A	c.1798_1799GT>AG c.1783T>C	c.1798G>A c.1784T>C	c.1798G>T c.1785T>G	c.1799_1800TG>AA c.1785T>A	c.1799T>A c.1786G>C	c.1790T>G	c.1790T>A	c.1797_1797A>TACTACG	c.1799_1800TG>AT	c.1799T>G	c.1799T>C	c.1801A>G	c.1801_1803delAAA
NRAS	c.180_181AC>TA c.34G>C c.52G>A	c.181_182CA>AG c.34G>T	c.181C>A c.34G>A	c.181C>G c.35G>A	c.181_182CA>TT c.35G>C	c.181_183CAA>AAG c.35G>T	c.182A>C c.37G>C	c.182A>T c.37G>T	c.182A>G c.37G>A	c.182_183AA>TG c.38_39GT>TC	c.182_183AA>GG c.38G>A	c.183A>T c.38G>T	c.183A>C c.38G>C	-	-	-	-	-
CDKN2A	c.171_172CC>TT c.205G>T	c.172C>T	c.181G>T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAP2K1	c.332T>G c.361T>A	c.362G>C	c.370C>T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FGFR3	c.742C>T c.1138G>A c.1172C>A c.1921G>A c.1948A>G	c.746C>G c.1948A>C	c.1949A>T	c.1949A>C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AKT3	c.511G>A c.371A>T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KIT	c.154G>A c.2466T>A c.1727T>C c.1755C>T c.1924A>G c.1961T>C c.2446G>T c.1651_1665del15	c.1656_1673del18 c.2466T>G c.2446G>C c.1735_1737delGAT	c.1667_1672delAGTGG c.2467T>G c.2447A>T c.1669_1674delTGGAAG	c.1669T>A c.2474T>C	c.1669T>C	c.1669T>G	c.1669_1683del15	c.1672_1680del9	c.1672_1686del15 c.1673_1687del15	c.1675_1677delGTT	c.1675G>A	c.1676T>A	c.1676T>G	c.1676T>C	c.1679T>A	c.1679T>G	-	-
PIK3CA	c.1616C>G c.1633G>A	c.1624G>A c.1637A>C	c.1624G>C c.1637A>G	c.1625A>T	c.1633G>C	c.1634A>G	c.1634A>C	c.1635G>T	c.1635G>C	c.1636C>A	c.1636C>G	c.1637A>T	-	-	-	-	-	-
GNAQ	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	c.626A>T
GNA11	c.626A>T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-