|  |  |  |
| --- | --- | --- |
| **Deletion/Mutation** | **Template (s)** | **Primers** |
| ∆2-10 | pSGEM.Kv10.1pSGEM Kv10.1 L341Split | F attcgatatcaagcttatggtggcccctcaaaacacgtttct R cggtatcgataagcttcagctggctccaaaaatgtctctct  |
| ∆PASCap 2-25 | pSGEM Kv10.1 | F gctgccgccaccatg aatgatactaattttgtgttggggaa R catggtggcggcagctcg |
| ∆CNBHD525-697 | psGEM Kv10.1. | F tccagaggcattgac aatgaggcccccctgatcttgc R gtcaatgcctctggacatggaccaa |
| L322H | pSGEM Kv10.1 ∆PASCap pSGEM Kv10.1 E600R | F gatgagggcatcagcagccatttcagctctctaaaagttgtR acaacttttagagagctgaaatggctgctgatgccctcatc |
| N-terminal CaM binding site (BDN) F151NL154N | pSGEM Kv10.1 ∆2-10 pSGEM Kv10.1 ∆PASCap | F151N ctcttgtcagccgagcattcttcccccagcctttacL154N tgcttgtcagtgctcttgtattccgagcattcttcccccag  |
| C-terminal CaM binding site (BDC2) F714SF717S  | pSGEM Kv10.1 ∆2-10 pSGEM Kv10.1 ∆PASCap | F714S gtcggaatctctggctgaggcgccggacagF717S ctgctgtcggcttctctggctgaggcgccgg |

**Table S3. Primers used for infusion cloning or site-directed mutagenesis.** The sequences are listed 5’-3'. For mutagenesis primers, only the sense sequences are given. The reverse primers corresponded to the reverse-complement sequence.