# Development of New STMS markers for sugarcane

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Primer Name : **NKS 48**
Forward Sequence :**ggaagcaagcaagaagaacc**
Reverse Sequence :**tctctgcagtgtgtgtgctg**
Gene Bank acesion No. of source sequence :**SHY401328**
Type of sequence :**Genomic DNA**

Source Sequence:

```
  1 actgctccttgaatcactcccggagtagaatcgactctttaccaagcgaatgcatcgtaa

 61 gaaattgcttctcggcgtcgccctctatacttacatgcaaccacaggtcctaaaatgccc

121 ctccatgtgcatgggcgggcaggtgtatggctggacggcggtgctggtcgaggcaaaagc

181 gcgatgactgaggcgaggcgccgggtgggaaatcacagcgtagtaggaggcacgaggttg

241 gtgagatcgtcgtgagaaagacgagaaaaaggggacaaagagataaataggggagaaaaa

301 aaagaaattgttaaaggagaaataagtaaaggacgaaaatgctattagaacatttcatgc

361 attattatcgagtgtaactaaatcatgtgcctctttcgttcccacattttatctaagaat

421 ttgacagcaatgaataattgtcatttgaaagaactggaagcaagcaagaagaaccaacag

481 tagccgaaracaagcaatgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgt

541 gtgtgtgtgtgatcgagaaggcaagtgcatggccgctgtcgatgagcttcatcttgacgg

601 tgcaatgccttgcggtgcagcacacacactgcagagaaaagagctccaaatgcaagccg

661 gaaaaggaagaaggccctgtttggttcatgaatgttaaagttttactctcatcacatcaa

721 tgttgcggtaaatacatgang
```

Repeat Motif :**(tg)27**
Total number and names of the germplasm lines tested: **48** (view table)
No. of PCR products amplified :**5**
The size of the PCR product :**135 - 204 bp**
The general PCR protocol used :200 µM of each dNTPs, 6pmol each of the forward and reverse primer, 0.5 units of Taq DNA polymerase

The PCR cycling condition: Pre-denaturation: $94^0$C (5 min),
25 cycles of Denaturation: $94^0$ C (50 sec),
Annealing : $55^0$ C (50 sec),
Extension : $72^0$ C (50 sec) and
Final extension : $72^0$ C (7 min).

Reference: Unpublished