|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SNPs | Primers | Hybridization temperature | Product Length | Restriction Enzyme | Incubation temperature |
|  | DPYD |  |
| 1905+1G >A [[1]](#endnote-1) | F : 5’ ATCAGGACATTGTGACATATGTTT 3’R : 5’CTTGTTTTAGATGTTAAATCACACATA 3’ | 60°C | 198pb | *NdeI* | 37°C |
| 496A>G[[2]](#endnote-2) | F : 5’GGTGGGAGTAGGGAATGTGC3’R : 5’GGAAGCACAACTTATACTTGCAG3’ | 58.8°C | 377pb | *BsrDI* | 55°C |
| 85T>Cii | F :5’CAGCCTGGGTGACAAAGTGAGGTAGAC3’R : 5’GTCTAATTTCTTGGCCGAAGTGGTAC3’ | 56°C | 193pb | *HPY166II* | 37°C |
| 1679T>Gii  | F : 5’CACTCCTATTGATCTGGTGGAC3’R : 5’CAAGAGAGAAAGTTTTGGTG3’ | 58°C | 161pb | *BstBI* | 37°C |
| c.483+18G>A | F : 5’GTTGGGTATCAACAGAGCAC3’R : 5’CTTTGTGTAGGTGGATGCAAT3’ | 54°C | 177pb | *MaeII* | 65°C |
|  | TYMS |  |
| 5'UTR VNTR[[3]](#endnote-3) | F: 5’CGTGGCTCCTGCGTTTCC3’R: 5’GAGCCGGCCACAGGCAT3’ | 63.4°C | - | - | - |
| TSER\*3 G>Ciii | - | - | - | *HaeIII* | 37°C |
| 3'UTR 6pb ins/del[[4]](#endnote-4) | F : 5’CAAATCTGAGGGAGCTGAGT3’R : 5’CAGATAAGTGGCAGTACAGA3’ | 58°C | 152pb | *DraI* | 37°C |

Supplementary Table A.1: Primer sequences and restriction endonuclease:

1. Uzunkoy A, Dilmec F, Ozgonul A, van KUILENBURG AB, Akkafa F. Investigation of IVS14+ 1G> A polymorphism of DPYD gene in a group of Turkish patients with colorectal cancer. Anticancer research. 2007;27(6B):3899-902. [↑](#endnote-ref-1)
2. Kristensen M, Pedersen P, Melsen G, Ellehauge J, Mejer J. Variants in the dihydropyrimidine dehydrogenase, methylenetetrahydrofolate reductase and thymidylate synthase genes predict early toxicity of 5-fluorouracil in colorectal cancer patients. Journal of International Medical Research. 2010;38(3):870-83 [↑](#endnote-ref-2)
3. Kawakami K, Salonga D, Park JM, Danenberg KD, Uetake H, Brabender J, et al. Different lengths of a polymorphic repeat sequence in the thymidylate synthase gene affect translational efficiency but not its gene expression. Clinical cancer research. 2001;7(12):4096- 101. [↑](#endnote-ref-3)
4. Zhang Z, Shi Q, Sturgis EM, Spitz MR, Hong WK, Wei Q. Thymidylate synthase 5′- and 3′-untranslated region polymorphisms associated with risk and progression of squamous cell carcinoma of the head and neck. Clinical cancer research. 2004;10(23):7903-10. [↑](#endnote-ref-4)