**Supplementary Table 4.** Results obtained on FP – ETOH sample. the fused transcripts identified by using our NGS approach are highlighted in red.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Locus | Type | Filter | Genes  (exons) | Read counts | Detection |
| chr6:170871321 | EXPR\_CON- | PASS | *TBP* | 63629 | Present |
| chr12:53585787 | EXPR\_CON- | PASS | *ITGB7* | 4434 | Present |
| chr8:128751265 | EXPR\_CON- | PASS | *MYC* | 108560 | Present |
| chr11:118960975 | EXPR\_CON- | PASS | *HMBS* | 68122 | Present |
| chr1:156104319 | EXPR\_CON- | PASS | *LMNA* | 131058 | Present |
| chr4:25665952 – chr6:117650609 | FUSION | PASS | *SLC34A2*(4) - *ROS1*(32) | 46965 | Present |
| chr10:61665880 –  chr10:43612032 | FUSION | PASS | *CCDC6*(1) - *RET*(12) | 33085 | Present |
| chr2:42522656 – chr2:29446394 | FUSION | PASS | *EML4*(10) - *ALK*(20) | 52 | Present |
| chr4:25665952 –  chr6:117645578 | FUSION | PASS | *SLC34A2*(4) - *ROS1*(34) | 910 | Present |
| chr1:154142878 – chr1:156844363 | FUSION | PASS | *TPM3*(8) - *NTRK1*(10) | 1591 | Present- Non-Targeted |

Abbreviations: *ALK*:Anaplastic Lymphoma Kinase; *CCDC6*: Coiled-Coil Domain Containing 6; chr: chromosome; *EML4*: Echinoderm Microtubule-Associated Protein-Like 4; ETOH: ethanol; FP: fusion positive; *HMBS*: Hydroxymethylbilane Synthase; *ITGB7*: Integrin Subunit Beta 7; *LMNA*: Lamin A/C; *NTRK1*: Neurotrophic Receptor Tyrosine Kinase 1; *TBP*: TATA-Box Binding Protein; *MYC*: MYC Proto-Oncogene, BHLH Transcription Factor; *RET*: Rearranged During Transfection;  *ROS1*: ROS Proto-Oncogene 1, Receptor Tyrosine Kinase; *SLC34A2*: Solute Carrier Family 34 Member 2; *TPM3*: Tropomyosin 3.