**Supplementary Table S1*: Therapeutic candidate genes for lung cancer***

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| --- | --- | --- | --- | --- | --- | --- |
| **Gene ID** | **Official Symbol** | **Full name** | **Alias** | **Location** | **Family/ Function** | **Ref.** |
| 3832 | KIF11 | kinesin family member 11 | Eg5; HKSP; KNSL1 | 10q24.1 | kinesin-like protein family/  motor protein | (1, 2, 3) |
| 4101 | MAGE-A2 | melanoma antigen family A, 2 | CT1.2; MAGE2 | Xq28 | MAGEA gene family/  p53 transcriptional suppression | (4) |
| 5347 | PLK1 | polo-like kinase 1 | PLK; STPK13 | 16p12.2 | Serine/threonine-protein kinase | (5, 6) |
| 9493 | KIF23 | kinesin family member 23 | CHO1, KNSL5, MKLP-1 | 15q23 | kinesin-like protein family/  motor protein | (7) |
| 10403 | NDC80 | NDC80 kinetochore complex component | HEC; KNTC2 | 18p11.32 | organize and stabilize microtubule-kinetochore interactions and is required for proper chromosome segregation | (8) |
| 57082 | CASC5 | cancer susceptibility candidate 5 | D40; CT29; AF15Q14 | 15q14 | a component of the multiprotein assembly that is required for creation of kinetochore-microtubule attachments and chromosome segregation. | (9) |
| 83450 | NUF2 | NUF2, NDC80 kinetochore complex component | CDCA1; CT106 | 1q23.3 | a component of a conserved protein complex associated with the centromere | (8) |
| 113130 | CDCA5 | cell division cycle associated 5 | SORORIN | 11q12.1 | Regulator of sister chromatid cohesion in mitosis | (10) |

([1-6](#_ENREF_1)) ([7](#_ENREF_7)) ([8](#_ENREF_8)) ([9](#_ENREF_9)) ([10](#_ENREF_10))

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