WHAT IS CLAIMED IS:

1. A nucleic acid oligomer characterized by:

a) a backbone wherein all internucleoside linkages of the backbone are phosphorothioate internucleoside linkages;

a purine content of at least about 45% with a guanosine-cytosine (GC) content of at least about 50%; and

a length of no more than 29 nucleobases, wherein the nucleic acid oligomer comprises the nucleobase sequence set forth in SEQ ID NO: 1,

wherein the oligomer binds to one or both of a THO complex subunit 4 (THOC4) protein and a single-stranded DNA-binding protein 1 (SSB1).

2. The nucleic acid oligomer of claim 1, wherein the backbone of the oligomer comprises at least one 2'-O-alkyl modified sugar moiety.

3. The nucleic acid oligomer of claim 2, wherein all sugar moieties of the oligomer are each a 2'-O-alkyl modified sugar moiety.

4. The nucleic acid oligomer of claim 2 or claim 3, wherein the 2'-O-alkyl modified sugar moiety is a 2'-O-methyl nucleoside.

5. The nucleic acid oligomer of any one of claims 1 to 4, wherein the nucleobase sequence of the nucleic acid oligomer is as set forth in SEQ ID NO: 1.

6. A pharmaceutical composition comprising the nucleic acid oligomer of any one of claims 1 to 5, and a pharmaceutically acceptable carrier.

7. Use of the nucleic acid oligomer of any one of claims 1 to 5 or the composition of claim 6 in the manufacture of a medicament for inhibiting proliferation, survival or viability of a tumor cell.

8. The nucleic acid oligomer of any one of claims 1 to 5 or the composition of claim 6 for use in inhibiting proliferation, survival or viability of a tumor cell.

9. The use of claim 7 or the nucleic acid oligomer for use according to claim 8, wherein the tumor cell is selected from breast, prostate, ovarian, cervical, pancreatic, colorectal, lung, hepatocellular, gastric, liver, bladder, urinary tract, thyroid, renal, carcinoma, melanoma, brain, non-small cell lung, squamous cell of the head and neck, endometrial, multiple myeloma, rectal, and esophageal tumor cells.

10. The use of claim 7 or the nucleic acid oligomer for use according to claim 8, wherein the tumor cell is selected from prostate, lung, non-small cell lung, breast, cervical and bone tumor cells.

11. Use of the nucleic acid oligomer of any one of claims 1 to 5 or the composition of claim 6 in the manufacture of a medicament for treating or preventing a cancer in a subject.

12. The nucleic acid oligomer of any one of claims 1 to 5 or the composition of claim 6 for use in treating or preventing a cancer in a subject.

13. The use of claim 11, or the nucleic acid oligomer for use according to claim 12, wherein the cancer is a solid tumor or blood borne tumor.

14. The use of claim 11 or claim 13, or the nucleic acid oligomer for use according to claim 12 or claim 13, wherein the cancer is a primary cancer or a metastatic cancer.

15. The use of any one of claims 11, 13 and 14, or the nucleic acid oligomer for use according to any one of claims 12 to 14, wherein the cancer is selected from breast cancer, prostate cancer, ovarian cancer, cervical cancer, pancreatic cancer, colorectal cancer, lung cancer, hepatocellular cancer, gastric cancer, liver cancer, bladder cancer, cancer of the urinary tract, thyroid cancer, renal cancer, carcinoma, melanoma, brain cancer, non-small cell lung cancer, squamous cell cancer of the head and neck, endometrial cancer, multiple myeloma, rectal cancer, and esophageal cancer

16. The use of any one of claims 11, 13 and 14, or the nucleic acid oligomer for use according to any one of claims 12 to 14, wherein the cancer is selected from prostate cancer, lung cancer, breast cancer, cervical cancer and bone cancer.

17. The use of any one of claims 11 and 13 to 16, or the nucleic acid oligomer for use according to any one of claims 12 to 16, wherein the nucleic acid oligomer is administered concurrently with at least one ancillary agent selected from an anti-infective agent, a chemotherapeutic agent and an immunotherapeutic agent.

18. The use or nucleic acid oligomer for use according to claim 17, wherein the anti-infective agent is selected from antibiotics, amebicides, antifungals, antiprotozoals, antimalarials, antituberculotics and antivirals.

19. The use or nucleic acid oligomer for use according to claim 17, wherein the chemotherapeutic agent is selected from antiproliferative and/or antineoplastic drugs, cytostatic agents, agents that inhibit cancer cell invasion, inhibitors of growth factor function, anti-angiogenic agents and vascular damaging agents.

20. The use or nucleic acid oligomer for use according to claim 17, wherein the immunotherapeutic agent is selected from cytokines, cytokine-expressing cells and antibodies.