**Part 1**

**cDNA of Homo sapiens interleukin 6 (IL6):**

5’-ATGAACT CCTTCTCCAC AAGCGCCTTC GGTCCAGTTG CCTTCTCCCT GGGGCTGCTCCTGGTGTTGC CTGCTGCCTT CCCTGCCCCA GTACCCCCAG GAGAAGATTC CAAAGATGTAGCCGCCCCAC ACAGACAGCC ACTCACCTCT TCAGAACGAA TTGACAAACA AATTCGGTACATCCTCGACG GCATCTCAGC CCTGAGAAAG GAGACATGTA ACAAGAGTAA CATGTGTGAAAGCAGCAAAG AGGCACTGGC AGAAAACAAC CTGAACCTTC CAAAGATGGC TGAAAAAGATGGATGCTTCC AATCTGGATT CAATGAGGAG ACTTGCCTGG TGAAAATCAT CACTGGTCTTTTGGAGTTTG AGGTATACCT AGAGTACCTC CAGAACAGAT TTGAGAGTAG TGAGGAACAAGCCAGAGCTG TGCAGATGAG TACAAAAGTC CTGATCCAGT TCCTGCAGAA AAAGGCAAAGAATCTAGATG CAATAACCAC CCCTGACCCA ACCACAAATG CCAGCCTGCT GACGAAGCTGCAGGCACAGA ACCAGTGGCT GCAGGACATG ACAACTCATC TCATTCTGCG CAGCTTTAAGGAGTTCCTGC AGTCCAGCCT GAGGGCTCTT CGGCAAATGT AG-3’

**Sequence of RP3-340N1.2:**

5’CCGGGAAATCGGGTGACTGATGGACGGTGGAGGCAGCCCCTTAGGCAGTTTAGGCCTGCCCTGTGAAGTATCCCTGTGGGCGGCTCTGGCCAGCTTGAGTGACGCAGATCCTGAGAGCGCTCCTGGGTAGGTATTTGCCCCGGTGGGATGCCTTATCAGAGTGGTGCATGGCAGGCCCCCGTGGAGGATCAACGCAGTGGCTGAACACTGGGAAGGAACTGGCACTTGGAGTCTGGACAACTGGAATACGGTGATCGGGTATGGATCACGGATTGGAACATAGCCTCCTTGCAGCCACGGTGGAGAGGACCCCAGACCATCGTCTTGACCACTCCCACAGCCATAAAGGTAGAAGGAATCCCAGCCTGGATTCACCACAGCCATGTAAAACCTAAAGCATCTGAGACCTGGGAGGTGAGACCAAGCTTGGACAACCCATGCAAGATGACTTTGAAGAAGATGACAAGCCCTGCTCCAGTCACACCTGGAAGCTGACTGGTCCGTGCATGGCTGAAGCATGAGGAAACTCATCGTGGGACTCATTTTCCTAAAATTTTGGACTTGTACAGTAAGGACTTCAACTGACCTTCCTCAGACTGAGGTAGGGCAAAAAGTTAAAACAGACTTTCTGTTTAAAAGGGACTTGTGTGTATAATGCTACCCAGTACAAGATATGCAGCCCAAGAAGTGACCAGCTTGATGTGTGCTATAACCCATTGGAACTAGTTTATCCCTGTTGGAAAACAGAGTATGTAACTCTAGGAATTGATGGAACTGGACTGGAAGACCTGGGTAGTGAAGATGACAGTGAGAACTCCCACTAGTGAGTGAGATTCTCAAAGGGGGGAATGAGAAGTGAGGCCATTTCTCTTACTGTCTCCTGTCTCTGAAGAGGAGGAGGAAGTAAAAGTTGAAAAACAACAGGAATGAAGTCATTGGCAAGACCAGCCGGTGCCACTGATGACCAGGCCTGAGGTTAAAAGATCAACCCCCCACTCTAACCACATGTGCTCTCAATCTATCATGACCCTTTCATGTGGACCCCCTTAGAGTTGTAAGCCCTTAAAAGGGCCAGGAACTCTGTCTTCAGGGAGCTCGGTTCTTGAGACATGAGTCTGCCAAAGCTCCCAGCTGTTGAGATGCGAGTCTGCCAAAGCTCCTGGCCGAATAAAGCCAAATCCTTCCTTAA3’

**Part 2** **Supplemental Figures**



Supplemental Figure S1 RP3-340N1.2 knockdown suppressed NSCLC cell proliferation/migration and reduced macrophage polarization toward tumor-associated phenotypes. **a.** Repeats of flow cytometry analysis of CD206 staining in macrophages treated with conditioned media derived from A549 and H1975 cells with 4 different treatment methods. **b**. statistical analysis of flow cytometry **c.** quantification of Arg1 expression **d.** quantification of ZC3H12A**.** ns *p*>0.05; \* *p*<0.05; \*\*\* *p* <0.001. n=3.