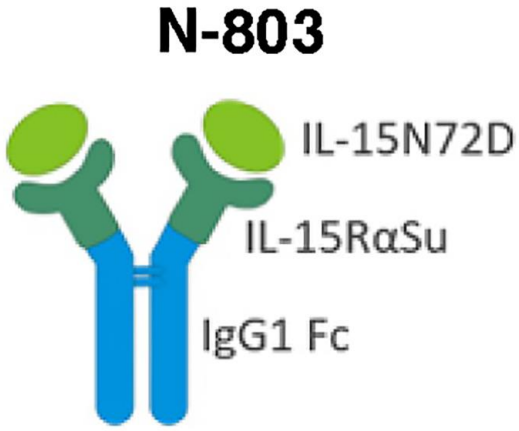
Supplementary Figure 1.

N-803 structure:IL-15N72D:IL-15RαSuFc complex consisting of IL-15N72D associated with the dimeric IL-15RαSuFc fusion protein.

Abbreviations: IL-15, interleukin-15.

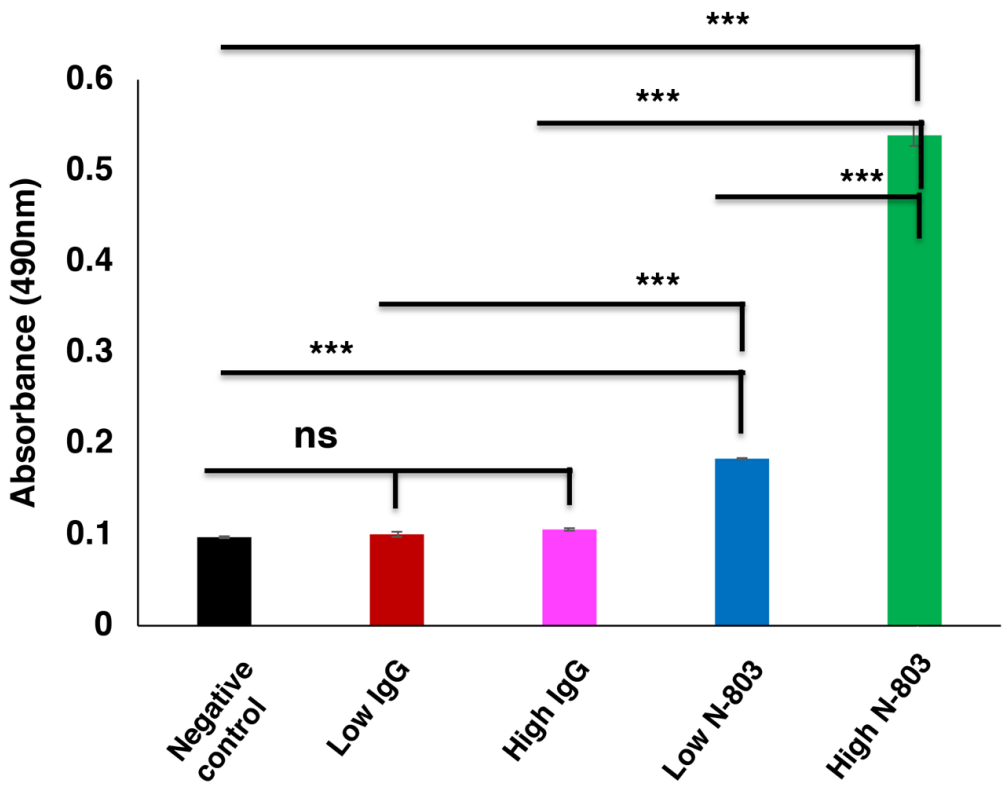
Revised from: Alter S, Rhode PR, Jeng EK, Wong HC. Targeted IL-15-based protein fusion complexes as cancer immunotherapy approaches. J Immunol Sci 2018;2:15-8.



Supplementary Figure 2.

N-803 increased the viability and proliferation of exPBNK at day 7.

PBMNCs were stimulated with irradiated genetically modified K562-mbIL21 - 41BBL cells for 2-3 weeks. Purified exPBNK cells were cultured in complete medium with 0.35 ng/ml (low) or 3.5ng/ml (high) N-803(22) or molar equivalent dose of IgG for 7 days. NK viability and proliferation were monitored by MTS assays. The amount of 490nm absorbance is directly proportional to the number of living exPBNK cells in culture. The exPBNK cells with N-803 at 0.35 ng/ml or 3.5ng/ml have significantly higher viability compared to IgG or medium controls ($p<0.001$). And N-803 at 3.5ng/ml significantly stimulated the proliferation of exPBNK cells as compared to N-803 at 0.35ng/ml ($p<0.001$). Data were presented as mean±sem from 3 independent experiments.



Supplementary Figure 3.

GD2 expression on the surface of U2OS, SKNFI and M059K cells.

U2OS, SKNFI and M059K cells were analyzed for the GD2 expression by flow cytometry. PE/Cyanine7-conjugated anti-GD2 monoclonal antibody (Biolegend, CA, USA) were used to stain the cells in the dark at 4^0C for 30 minutes. After washing the cells 3 times, samples were analyzed on a MACSQuant Analyzer (Miltenyi Biotec). No stain and isotype controls were used for gating. A minimum of 10,000 events was collected and analyzed using MACSQuantify™ Software. Data were presented as mean±sem from 3 independent experiments.