

WHAT IS CLAIMED:

1. A method of treating a solid tumor in a human subject, the method comprising administering to the subject
 - (i) about 0.1 to about 20 mg/kg of an anti-B7-H4 antibody or antigen-binding fragment thereof that specifically binds to human B7-H4 and comprises a heavy chain variable region (VH) complementarity determining region (CDR) 1 comprising the amino acid sequence of SEQ ID NO:5, a VH CDR2 comprising the amino acid sequence of SEQ ID NO:6, a VH CDR3 comprising the amino acid sequence of SEQ ID NO:7, a light chain variable region (VL) CDR1 comprising the amino acid sequence of SEQ ID NO:8, a VL CDR2 comprising the amino acid sequence of SEQ ID NO:9, and a VL CDR3 comprising the amino acid sequence of SEQ ID NO:10; and
 - (ii) about 200 mg of an anti-PD-1 antibody or antigen-binding fragment thereof comprising a VH CDR1 comprising the amino acid sequence of SEQ ID NO:34, a VH CDR2 comprising the amino acid sequence of SEQ ID NO:35, a VH CDR3 comprising the amino acid sequence of SEQ ID NO:36, a VL CDR1 comprising the amino acid sequence of SEQ ID NO:37, a VL CDR2 comprising the amino acid sequence of SEQ ID NO:38, and a VL CDR3 comprising the amino acid sequence of SEQ ID NO:39; or
- (a) a pharmaceutical composition comprising
 - (i) anti-B7-H4 antibodies or antigen-binding fragment thereof, wherein the anti-B7-H4 antibodies or antigen-binding fragments thereof specifically bind to human B7-H4 and comprise a VH CDR1 comprising the amino acid sequence of SEQ ID NO:5, a VH CDR2 comprising the amino acid sequence of SEQ ID NO:6, a VH CDR3 comprising the amino acid sequence of SEQ ID NO:7, a VL CDR1 comprising the amino acid sequence of SEQ ID NO:8, a VL CDR2 comprising the amino acid sequence of SEQ ID NO:9, and a VL CDR3 comprising the amino acid sequence of SEQ ID NO:10 and
 - (ii) a pharmaceutically acceptable excipient,
 - wherein at least 95% of the anti-B7-H4 antibodies or antigen-binding fragments thereof in the composition are afucosylated, and
 - wherein about 0.1 to about 20 mg/kg of the antibodies or antigen-binding fragments thereof are administered; and
- (b) a pharmaceutical composition comprising an anti-PD-1 antibody or antigen-binding

fragment thereof comprising a VH CDR1 comprising the amino acid sequence of SEQ ID NO:34, a VH CDR2 comprising the amino acid sequence of SEQ ID NO:35, a VH CDR3 comprising the amino acid sequence of SEQ ID NO:36, a VL CDR1 comprising the amino acid sequence of SEQ ID NO:37, a VL CDR2 comprising the amino acid sequence of SEQ ID NO:38, and a VL CDR3 comprising the amino acid sequence of SEQ ID NO:39 and a pharmaceutically acceptable excipient, wherein about 200 mg of the antibody or antigen-binding fragment is administered;

wherein the anti-B7-H4 antibody or antigen-binding fragment thereof is an antigen-binding fragment, wherein the antigen-binding fragment comprises a Fab, Fab', F(ab')₂, single chain Fv (scFv), disulfide linked Fv, V-NAR domain, IgNar, intrabody, IgGΔCH2, minibody, F(ab')₃, tetrabody, triabody, diabody, single-domain antibody, DVD-Ig, Fcab, mAb², (scFv)₂, or scFv-Fc.