CLAIMS

1. A method of producing a picornavirus-like particle (PVLP) in a plant, a portion of a plant, or a plant cell comprising:

a) introducing a first nucleic acid and a second nucleic acid into the plant, portion of the plant, or the plant cell, the first nucleic acid comprising a first regulatory region active in the plant operatively linked to a first nucleotide sequence encoding a picornavirus polyprotein comprising P1 and the second nucleic acid comprising a second regulatory region active in the plant and operatively linked to a second nucleotide sequence encoding one or more than one picornavirus 3C or 3CD protease;

b) incubating the plant, portion of the plant, or plant cell under conditions that permit the expression of the first and second nucleic acids to produce a picornavirus polyprotein and the one or more than one picornavirus 3C or 3CD protease, the picornavirus polyprotein being processed into structural proteins VP1, VP3 and VP0, or VP1, VP2, VP3 and VP4, thereby producing the PVLP;

c) harvesting the plant, the portion of the plant, or plant cell and purifying the PVLPs; and

wherein the first nucleotide sequence encoding the picornavirus polyprotein is derived from the group of Aphthovirus, Avihepatovirus, Cardiovirus, Erbovirus, Hepatovirus, Kobuvirus, Parechovirus, Sapelovirus, Senecavirus, Teschovirus and Tremovirus.