specifically to the ileum of the subject. The present disclosure thus provides more efficient and effective vaccines, and demonstrates their effectiveness in humans.

[0005a] In one aspect, there is disclosed an immunogenic composition for eliciting an immune response in a human comprising: (i) an immunogenic biological agent encompassed by (ii) an agent that directs delivery of the immunogenic biological agent to the ileum of the human, wherein agent (ii) is an enteric coating that has a threshold pH 5.8-6.8.

[0005b] Another aspect relates to the immunogenic composition as disclosed herein formulated for oral delivery of an immunogenic composition to the ileum of a human.

[0005c] Another aspect relates to the use of the composition as disclosed herein in the manufacture of a medicament for eliciting an immune response in a human, wherein the immune response is specific for the immunogenic biological agent.

[0006] Provided herein are immunogenic compositions for eliciting an immune response in a subject comprising: an immunogenic biological agent encompassed by an agent that directs delivery of the immunogenic biological agent to the ileum of the subject. In some embodiments, the subject is a human. In some embodiments, the subject is a non-human animal, *e.g.*, primate, mouse, rat, rabbit, horse, dog, cat, or poultry. In some embodiments, the immunogenic biological agent is selected from an immunogenic polypeptide (*e.g.*, virus like particle, glycoprotein, phosphoprotein), carbohydrate, and lipid.

[0007] In some embodiments, the immunogenic biological agent is an expression vector encoding an immunogenic polypeptide. In some embodiments, the expression vector is a viral vector (*e.g.*, adenoviral, AAV, retroviral, or lentiviral). In some embodiments, the viral vector is attenuated or replication incompetent. In some embodiments, the expression vector comprises a promoter (*e.g.*, CMV, SV40 early or late, β-actin, etc.) operably linked to the sequence encoding the immunogenic polypeptide. In some embodiments, the expression vector further encodes double stranded (dsRNA). In some embodiments, the dsRNA encoding sequence is operably linked to a promoter, *e.g.*, either the same promoter (using an Internal Ribosomal Entry Site (IRES)) or a different promoter as the promoter operably linked to the immunogenic polypeptide encoding sequence.

[0008] In some embodiments, the immunogenic composition further comprises at least one adjuvant, *e.g.*, a TLR3 agonist. In some embodiments, the TLR3 agonist is dsRNA or a dsRNA mimetic.

[0009] In some embodiments, at least 50% of the immunogenic biological agent is delivered (released) in the ileum, *e.g.*, at least 60%, 70%, 75%, 80%, 90%, 95%, or more of the immunogenic biological agent present in the administered composition. In some embodiments, the agent that directs delivery (*e.g.*, the enteric coating or matrix) begins to dissolve before the immunogenic composition reaches the ileum, but retains at least 50% of the immunogenic biological agent until the immunogenic composition reaches the ileum. In some embodiments, the agent that directs delivery retains the immunogenic biological agent through the stomach, duodenum, and jejunum, but releases the immunogenic biological agent in the ileum.

20. The immunogenic composition of any one of claims 1-19, wherein the immunogenic biological agent is an expression vector encoding an immunogenic polypeptide

21. The immunogenic composition of claim 20, wherein the vector is an adenoviral vector.

22. The immunogenic composition of claim 20 or 21, wherein the expression vector further encodes dsRNA.

23. The immunogenic composition of any one of the foregoing claims, wherein the composition is in the form of a compressed tablet.

24. The immunogenic composition of any one of the preceding claims, formulated for oral delivery of~~A method for delivering~~ an immunogenic composition to the ileum of a human~~ comprising orally administering the immunogenic composition of any one of the foregoing claims to the human~~.

25. Use of~~A method of eliciting an immune response in a human comprising administering~~ the composition of any one of claims 1-23 in the manufacture of a medicament for eliciting an immune response in ~~to the~~a human, wherein the immune response is specific for the immunogenic biological agent.

26 . The ~~method~~ use of claim 25, wherein the immunogenic biological agent is an immunogenic polypeptide and the immune response is specific for the immunogenic polypeptide.

27. The ~~method~~ use of claim 25, wherein the immunogenic biological agent is an expression vector encoding an immunogenic polypeptide, and the immune response is specific for the immunogenic polypeptide.

28. The ~~method~~ use of claim 27, wherein the expression vector is an adenoviral vector.

29. The ~~method~~ use of any one of claims 24-28, wherein the medicament ~~administering~~ results in production of neutralizing antibodies by the human.