We claim:

1. An isolated full-length genome of mumps virus attenuated JL2 strain comprises the polynucleotide sequence having SEQ ID NO.8.
2. A vector comprising polynucleotide sequence as claimed in claim 1, and, optionally, wherein the vector is selected from pUC19, pBluescript, pBluescript II, pBluescript II SK (+), pCA or pSC6.
3. A host cell comprising vector as claimed in claim 2, and optionally, wherein the host cell is selected from a mammalian cell or a non-mammalian cell.
4. The host cell as claimed in claim 3 wherein the mammalian cell is selected from HEK 293T cell, Vero cell or MRC-5 cell, and the non-mammalian cell is selected from bacterial cell or yeast cell.
5. A mumps virus vaccine comprising full-length genome of mumps virus attenuated JL2 strain as claimed in claim 1.
6. An immunogenic composition containing full-length genome of mumps virus attenuated JL2 strain as claimed in claim 1 with suitable pharmaceutical excipients, and optionally, wherein the pharmaceutical excipients are selected from buffer(s), stabilizer(s), tonicity agent(s), surfactant(s), adjuvant(s), cryoprotectant(s) or combination thereof.
7. The immunogenic composition as claimed in claim 6 wherein
   (a) Buffer is selected from phosphate-buffer, histidine-buffer, citrate-buffer, succinate-buffer, acetate-buffer, arginine buffer, phosphate buffered saline, tromethamine buffer and mixtures thereof;
   (b) Stabilizer is selected from amino acid(s), sugar(s), polyol(s), or combination thereof;
   (c) Tonicity agent is selected from sugar(s), salt(s) or combination thereof;
   (d) Surfactant is selected from polyoxyethylensorbitan fatty acid esters (Tween), polyoxyethylene alkyl ethers, alkylphenylpolyoxyethylene ethers, polyoxyethylene-polyoxypropylene copolymer and sodium dodecyl sulphate (SDS) or combination thereof;
   (e) Adjuvant is selected from salts of aluminium, Mono Phosphoryl Lipid analogues such as glucopyranosyl lipid adjuvant, monatide, cytokine inducers, squalene based adjuvants, lipophilic adjuvants or combination thereof; and

(f) Cryoprotectant is sugar(s).

8. The immunogenic composition as claimed in claim 7 comprises stabilizers selected from amino acid(s), sugar(s), polyol(s), or combination thereof, buffer(s) or salt(s).
9. The immunogenic composition as claimed in claim 8 wherein
   - Buffer is selected from phosphate-buffer, histidine-buffer, citrate-buffer, succinate-buffer, acetate-buffer, arginine buffer, phosphate buffered saline, tromethamine buffer and mixtures thereof;
   - Amino acid is selected from arginine, glycine, lysine, histidine, glutamic acid, aspartic acid, isoleucine, leucine, alanine, phenylalanine, tyrosine, tryptophane, methionine, serine, proline, cysteine / cystine and suitable combination thereof;
   - Sugar is selected from glucose, fructose, galactose, mannose, sorbose, ribose, deoxyribose, sucrose, trehalose, lactose, maltose, raffinose and suitable mixtures thereof preferably trehalose or raffinose;
   - Polyol is selected from mannitol, sorbitol, dextran, glycerol, arabitol, propylene glycol, polyethylene glycol and suitable combinations thereof;
   - Salt is selected from NaCl or KCl.
10. A rescue composition comprising the following elements:
    a. Transcription vector comprising polynucleotide sequence as claimed in claim 1;
    b. An expression vector comprises isolated gene(s) encoding trans-acting protein(s) wherein trans-acting protein is selected from NP protein, P protein, L protein and combination thereof;
    c. RNA polymerase for appropriate transcription of polynucleotide sequence as claimed in claim 1.
11. A method for producing a recombinant mumps virus comprising the following steps;
    a. Chemical synthesis of genome sequence fragments of mumps virus attenuated JL2;
    b. Cloning of each obtained gene fragment and their combination into an intermediate vector for its amplification;
    c. Construction of clone of full-length DNA genome comprises the polynucleotide sequence as claimed in claim 1 of the mumps virus attenuated JL2 strain to obtain $pMuV^{JL2}$ vector through ligation of each gene fragment obtained from step b, into single transcription vector;

d. Co-transfection of host cell with $pMuV^{JL2}$ and an expression vector comprising isolated gene encoding trans-acting protein wherein trans-acting protein is selected from NP protein, P protein and L protein and RNA polymerase to rescue negative strand of mumps virus;

e. optionally, passaging of rescued mumps virus into host cell for its expansion;

wherein the recombinant mumps virus comprises polynucleotide sequence as claimed in claim 1.

12. The composition of claim 10 or the method of claim 11, wherein the gene(s) encoding the trans-acting protein is selected from SEQ ID NO. 9 to 11.

13. The composition of claim 10 or 12 or the method of claim 11 or 12, wherein the amino acid sequence of the trans-acting proteins are selected from SEQ ID NO. 12 to 14.

14. The method of claim 11, wherein the vector encoding RNA polymerase is as set forth in SEQ ID NO. 15.

15. The method of producing a recombinant mumps virus as claimed in claim 11 wherein

- Transcription vector or an intermediate vector is selected from pUC19, pBluescript, pBluescript II, pBluescript II SK(+), pCA or pSC6; and/or
- Host cell is selected from HEK 293T cell, Vero cell or MRC-5 cell and non-mammalian cell is selected from E. coli or suitable yeast cells.