WE CLAIM:

1. A recombinant host cell comprising a modification in a coding sequence of a polynucleotide encoding a phospholipase B-like 2 (PLBD2) protein, wherein the modification decreases the expression level of the PLBD2 protein relative to the expression level of a PLBD2 protein in a cell lacking the modification, wherein the cell does not express detectable PLBD2 protein and wherein the cell further comprises an exogenously added gene encoding a protein of interest.

2. The host cell of claim 1, wherein

    a) all alleles of the coding sequence of the polynucleotide encoding the phospholipase B-like 2 (PLBD2) protein comprise the modification; and/or

    b) the modification comprises a nucleotide insertion or deletion within exon 1 of the coding sequence of the polynucleotide encoding the PLBD2 protein.

3. The host cell of claim 1 or 2, wherein the PLBD2 protein comprises an amino acid sequence at least 80% identical to SEQ ID NO: 32.

4. The host cell of any one of claims 1 to 3, wherein the PLBD2 protein comprises an amino acid sequence selected from the group consisting of SEQ ID NO: 32, SEQ ID NO: 34, SEQ ID NO: 35, and SEQ ID NO: 36.

5. The host cell of any one of claims 1 to 4, wherein the modification comprises a nucleotide insertion or deletion within SEQ ID NO: 47.

6. The host cell of any one of claims 1 to 5, wherein the exogenous protein of interest is selected from the group consisting of an antibody heavy chain, an antibody light chain, an antigen-binding fragment, and an Fc-fusion protein.

7. The host cell of any one of claims 1 to 6, wherein the cell produces a Protein A-binding fraction having no detectable esterase activity.

8. The recombinant host cell of any one of claims 1 to 7, wherein:
(a) the PLBD2 gene modification comprises a biallelic modification; and/or
(b) the PLBD2 gene modification comprises a deletion of 1 or more base pairs, 2 or more base pairs, 3 or more base pairs, 4 or more base pairs, 5 or more base pairs, 6 or more base pairs, 7 or more base pairs, 8 or more base pairs, 9 or more base pairs, 10 or more base pairs, 11 or more base pairs, 12 or more base pairs, 13 or more base pairs, 14 or more

base pairs, 15 or more base pairs, 16 or more base pairs, 17 or more base pairs, 18 or more base pairs, 19 or more base pairs, or 20 or more base pairs of the PLBD2 gene: and/or (c) the PLBD2 gene modification results in a frameshift of the translated PLBD2 protein.

9. The recombinant host cell of any one of claims 1 to 8, wherein the modification is a targeted disruption at a target site, wherein the target site is selected from the group consisting of the nucleotides spanning positions numbered 37-56, 44-56, 33-62, 40-69, 110-139, 198-227, 182-211, and 242-271 of SEQ ID NO: 33.

10. The recombinant host cell of any one of claims 1 to 9, wherein the recombinant host cell is a eukaryotic cell; optionally
wherein the eukaryotic cell is a mammalian cell; optionally
wherein the eukaryotic cell is selected from the group consisting of CHO K1 cell, a DXB-11 CHO cell, a Veggie-CHO cell, a COS-7 cell, a Vero cell, a CV1 cell, an HEK293 cell, a 293 EBNA cell, an MSR 293 cell, an MDCK cell, an HaK cell, a BHK21 cell, an HeLa cell, an HepG2 cell, a WI38 cell, an MRC 5 cell, a Colo25 cell, an HB 8065 cell, an HL-60 cell, a Jurkat cell, a Daudi cell, an A431 cell, a U937 cell, a 3T3 cell, an L cell, a C127 cell, a SP2/0 cell, an NS-0 cell, and an MMT cell; optionally
wherein the cell is a CHO cell.

11. A process for reducing esterase activity in a protein formulation comprising the steps of: (a) modifying a host cell to decrease or ablate the expression of phospholipase B-like 2 (PLBD2) protein, (b) transfecting the host cell with a polynucleotide encoding a protein of interest, (c) extracting a protein fraction comprising the protein of interest from the host cell, (d) contacting the protein fraction with a chromatography column selected from the group consisting of protein A affinity (PA), cation exchange (CEX), and anion exchange (AEX), (e) collecting the protein of interest from the media, and (f) combining the protein of interest with a fatty acid ester, and optionally a buffer and thermal stabilizer.

12. The process of claim 11, wherein the step of modifying a host cell to decrease or ablate the expression of phospholipase B-like 2 (PLBD2) protein comprises inserting or deleting at least one nucleotide within exon 1 of a polynucleotide encoding the PLBD2 protein.

13. The process of claim 12, wherein the polynucleotide encoding the PLBD2 protein comprises a nucleic acid sequence that is at least 80% identical to SEQ ID NO: 32.