SHIPPER EXPORT SELF-CERTIFICATION: Biological and Genetic Materials

This Certification is only for shipping of biological, biologically-derived, and genetic materials such as seeds, cell lines, plasmids, algae, lignin, and human/animal tissue. This form must be completed and signed by the individual, researcher, or PI (the "Shipper") from which the request for shipment originates. By completing this Self-Certification, the Shipper certifies that he/she has carefully reviewed the control lists provided below, and honestly answered all questions. For non-biological items, contact exportcontrol@lbl.gov.

Section A

1. List all biological or genetic items in this shipment (Be specific as possible. General terms like "DNA" or "protein" are not sufficient descriptors):	
2. Destination Country of Shipment: United States	
3. Name and Institution of Recipient(s):	
Lawrence Berkeley National Laboratory	
Joint Genome Institute, MS91:R265	
1 Cyclotron Rd	

Section B: EAR99 Analysis

Berkeley, CA 94720

Instructions: You are expected to review the current control lists <u>by clicking the links in B.1 and B.2 below</u> to verify your items are not on such lists. These lists can be updated at any time, so be sure to check the current lists each time you complete this form. Answer all sections in B, even if the answer is "N/A".

1. Is your item found on the Australia Group Common Control Lists for chemical and biological weapons: http://www.australiagroup.net/en/controllists.html	Yes No
If yes, please identify:	
2. Is your item found on the CDC Select Agents and Toxins List: http://www.selectagents.gov/SelectAgentsandToxinsList.html	Yes No
If yes, please identify: Note: List all agents or toxins, regardless of quantity or attenuation.	
3. Could your item be considered "Biological agents and biologically derived substances specifically developed, configured, adapted, or modified for the purpose of increasing their capability to produce casualties in humans or livestock, degrade equipment or damage crops"? (This includes "medical countermeasures and vaccines with the sole purpose of protecting against such biological agents")	Yes (ITAR XIV.b or h)
If yes, please identify and immediately contact exportcontrol@lbl.gov for further instructions:	
4. Is your item considered a plant pathogen (see Appendix A)?	Yes (1C354)
If yes, please identify and immediately contact exportcontrol@lbl.gov for further instructions:	No

5. If you answered "Yes" to B.1 or B.2, and "No" to B.3 and B.4, is your item:	Yes (1C351)
	res (1C351)
a) an isolated live culture of a pathogen agent, or	
b) a preparation of a toxin agent that has been isolated or extracted from	∐ No
any source or material, including living material that has been deliberately	
inoculated or contaminated with the agent? (Isolated live cultures of a	□ N/A
pathogen agent include live cultures in dormant form or in dried	
preparations, whether the agent is natural, enhanced or modified.)	
If yes, please contact <u>exportcontrol@lbl.gov</u> for further instructions.	
6. If you answered "Yes" to B.1 or B.2, and "No" to B.3 and B.4, is your item:	Yes (1C353.a)
Constitution of the state of th	
Genetic elements that contain nucleic acid sequences associated with either:	□No
a) the pathogenicity of microorganisms; or	
b) the coding for any of listed "toxins" or "sub-units of toxins" thereof.	
	∏ N/A
If yes, please contact <u>exportcontrol@lbl.gov</u> for further instructions.	
Technical Notes:	
1. "Genetic elements" include, inter alia, chromosomes, genomes, plasmids,	
transposons, and vectors, whether genetically modified or unmodified, or	
chemically synthesized in whole or in part.	
2. This ECCN <u>does not</u> control nucleic acid sequences associated with the	
pathogenicity of enterohaemorrhagic Escherichia coli, serotype O157 and other	
verotoxin producing strains, except those nucleic acid sequences that contain	
coding for the verotoxin or its sub-units.	
3. "Nucleic acid sequences" means any sequence specific to the relevant controlled	
microorganism that: -a. In itself or through its transcribed or translated products	
represents a significant hazard to human, animal or plant health; or -b. Is known to	
enhance the ability of a microorganism, or any other organism into which it may be	
inserted or otherwise integrated, to cause serious harm to human, animal or plant	
health.	
	Yes (1C353.b)
7. If you answered "Yes" to B.1 or B.2, and "No" to B.3 and B.4, is your item:	[] 163 (16355.6)
Genetically modified organisms that contain nucleic acid sequences associated with	□No
either:	
a) the pathogenicity of microorganisms; or	
b) the coding for any of listed "toxins" or "sub-units of toxins" thereof.	
	☐ N/A
If yes, please contact <u>exportcontrol@lbl.gov</u> for further instructions.	
Technical Notes:	
Technical Notes:	
"Genetically modified organisms" include organisms in which the genetic material	
"Genetically modified organisms" include organisms in which the genetic material (nucleic acid sequences) has been altered in a way that does not occur naturally by	
"Genetically modified organisms" include organisms in which the genetic material (nucleic acid sequences) has been altered in a way that does not occur naturally by mating and/or natural recombination, and encompasses those produced artificially	
"Genetically modified organisms" include organisms in which the genetic material (nucleic acid sequences) has been altered in a way that does not occur naturally by	
"Genetically modified organisms" include organisms in which the genetic material (nucleic acid sequences) has been altered in a way that does not occur naturally by mating and/or natural recombination, and encompasses those produced artificially	☐ Yes (1C991)
"Genetically modified organisms" include organisms in which the genetic material (nucleic acid sequences) has been altered in a way that does not occur naturally by mating and/or natural recombination, and encompasses those produced artificially in whole or in part. 8. Lastly, is your item considered any one of the following:	☐ Yes (1C991)
"Genetically modified organisms" include organisms in which the genetic material (nucleic acid sequences) has been altered in a way that does not occur naturally by mating and/or natural recombination, and encompasses those produced artificially in whole or in part. 8. Lastly, is your item considered any one of the following: a. Vaccines against items listed in B.1 or B.2 links	
"Genetically modified organisms" include organisms in which the genetic material (nucleic acid sequences) has been altered in a way that does not occur naturally by mating and/or natural recombination, and encompasses those produced artificially in whole or in part. 8. Lastly, is your item considered any one of the following: a. Vaccines against items listed in B.1 or B.2 links b. Immunotoxins containing items listed in B.1 or B.2 links	☐ Yes (1C991)
"Genetically modified organisms" include organisms in which the genetic material (nucleic acid sequences) has been altered in a way that does not occur naturally by mating and/or natural recombination, and encompasses those produced artificially in whole or in part. 8. Lastly, is your item considered any one of the following: a. Vaccines against items listed in B.1 or B.2 links b. Immunotoxins containing items listed in B.1 or B.2 links c. Medical products containing botulinum toxins or conotoxins	
"Genetically modified organisms" include organisms in which the genetic material (nucleic acid sequences) has been altered in a way that does not occur naturally by mating and/or natural recombination, and encompasses those produced artificially in whole or in part. 8. Lastly, is your item considered any one of the following: a. Vaccines against items listed in B.1 or B.2 links b. Immunotoxins containing items listed in B.1 or B.2 links c. Medical products containing botulinum toxins or conotoxins d. Medical products containing items listed in B.1 (Australia Group)	
"Genetically modified organisms" include organisms in which the genetic material (nucleic acid sequences) has been altered in a way that does not occur naturally by mating and/or natural recombination, and encompasses those produced artificially in whole or in part. 8. Lastly, is your item considered any one of the following: a. Vaccines against items listed in B.1 or B.2 links b. Immunotoxins containing items listed in B.1 or B.2 links c. Medical products containing botulinum toxins or conotoxins d. Medical products containing items listed in B.1 (Australia Group) e. Diagnostic and food testing kits containing	
"Genetically modified organisms" include organisms in which the genetic material (nucleic acid sequences) has been altered in a way that does not occur naturally by mating and/or natural recombination, and encompasses those produced artificially in whole or in part. 8. Lastly, is your item considered any one of the following: a. Vaccines against items listed in B.1 or B.2 links b. Immunotoxins containing items listed in B.1 or B.2 links c. Medical products containing botulinum toxins or conotoxins d. Medical products containing items listed in B.1 (Australia Group)	

If yes, please identify and immediately contact exportcontrol@lbl.gov for further
instructions:
f you answered "Yes" to any of the questions in Section B, stop here and send this form (unsigned) with your answers in Sections A through B to exportcontrol@lbl.gov to receive further instructions on shipping this item(s). t is possible your shipment may require a federal export license depending on the destination country.
f all questions in Section C are answered "No" or "N/A", the item(s) may be treated as EAR99 , proceed to Section C.
Section C: Prohibited Countries
1. Is the destination country any of the following?: Crimea, Cuba, North Korea, Sudan, or Syria
Yes: Contact exportcontrol@lbl.gov for further instructions – an export license may be required.
No: Proceed to Section D.
Section D: EAR99 Certification
<u>MPORTANT</u> : If this Certification is for multiple items in a single shipment, Section A.1 above should list only those tems which can be classified as "EAR99" as determined in Section B. All non-EAR99 items require further aboratory Export Review by emailing exportcontrol@lbl.gov .
By signing below, Shipper certifies he/she has reviewed the links and information provided in this form, has answered the Certification questions accurately, and that all items listed are EAR99 to the best of their knowledge. Shipper further understands and acknowledges that false or fraudulent certification may subject him/her to personal criminal and civil liability under U.S. export laws. (https://www2.lbl.gov/Workplace/olc/exportcontrol/index.html)
Shipper Signature Date
Shipper Printed Name
Upon signature, forward an electronic copy to Shipping and exportcontrol@lbl.gov for their records — no further export control review is required for this shipment if the result for all

items is EAR99. Upon receipt, Shipping will screen the named recipients against the U.S. Entity List to ensure they are not Restricted Parties prohibited from receiving shipments.

APPENDIX A: PLANT PATHOGENS (ECCN 1C354)

a. Bacteria, as follows:

- a.1. Xanthomonas albilineans;
- a.2. Xanthomonas axonopodis pv. citri

(Xanthomonas campestris pv. citri A)

(Xanthomonas campestris pv. citri);

a.3. Xanthomonas oryzae [this species of proteobacteria is identified on the APHIS "select agents" list (see Related Controls paragraph for this ECCN), but only the pathovar Xanthomonas oryzae pv. oryzae (syn. Pseudomonas campestris pv. oryzae) is identified on the Australia Group (AG) "List of Plant Pathogens for Export Control"];

a.4. Clavibacter michiganensis subspecies sepedonicus (syn. Corynebacterium michiganensis subspecies sepedonicum

or Corynebacterium sepedonicum);

a.5. Ralstonia solanacearum, race 3, biovar 2;

a.6. Raythayibactor toxicus [this bacterium is identified on the APHIS "select agents" list (see the Related Controls paragraph for this ECCN), but is not identified on the Australia Group (AG) "List of Plant Pathogens for Export Control"].

b. Fungi, as follows:

b.1. Colletotrichum kahawae

(Colletotrichum coffeanum var. virulans);

b.2. Cochliobolus miyabeanus

(Helminthosporium oryzae);

- b.3. Microcyclus ulei (syn. Dothidella ulei);
- b.4. Puccinnia graminis ssp. graminis var. graminis / Puccinia graminis ssp. graminis var. stakmanii (Puccinia graminis [syn. Puccinia graminis f. sp. tritici]);
- b.5. Puccinia striiformis (syn. Puccinia glumarum);
- b.6. Magnaporthe oryzae (Pyricularia oryzae);
- b.7. Peronosclerospora philippinensis

(Peronosclerospora sacchari);

- b.8. Sclerophthora rayssiae var. zeae;
- b.9. Synchytrium endobioticum;
- b.10. Tilletia indica;
- b.11. Thecaphora solani;
- b.12. Phoma glycinicola (formerly

Pyrenochaeta glycines) [this fungus is identified on the APHIS "select agents" list (see the Related Controls paragraph for this ECCN), but is not identified on the Australia Group (AG) "List of Plant Pathogens for Export Control"].

c. Viruses, as follows:

c.1. Andean potato latent virus (Potato Andean latent tymovirus);

c.2. Potato spindle tuber viroid.