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(71) Applicant: **BOEHRINGER INGELHEIM INTERNATIONAL GMBH** [DE/DE]; Binger Strasse 173, 55216 INGELHEIM AM RHEIN (DE).

(72) Inventors: **LIN, Henry**; c/o VP, IP Legal; Boehringer Ingelheim USA Corp. 900 Ridgebury Rd., P.O. Box 368, Ridgefield, CT 06877-0368 (US). **WANG, Samantha**; c/o VP, IP Legal; Boehringer Ingelheim USA Corp. 900 Ridgebury Rd., P.O. Box 368, Ridgefield, CT 06877-0368 (US). **ZHENG, Lili**; 1119 Reed Ave, Apartment B, Sunnyvale, CA 94086 (US).

(74) Agent: **SIMON, Elke Anna Maria** et al.; Boehringer Ingelheim International GmbH, Corporate Patents Binger Strasse 173, 55216 INGELHEIM AM RHEIN (DE).

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(54) Title: PERFUSION MEDIUM

(57) Abstract: The present disclosure provides a method of culturing mammalian cells, e.g., by perfusion cell culture, expressing a heterologous protein in a cell culture, comprising culturing mammalian cells expressing a heterologous protein in a culture medium comprising an effective amount of one or more lipids or lipid metabolites selected from the group consisting of: linoleic acid, arachidonic acid, and prostaglandin E2, or derivatives and/or precursors thereof. The lipids or lipid metabolites or combinations thereof can lead to growth suppression and/or increased productivity with reduced cell bleed. The present disclosure also provides methods for increasing the productivity of a cell culture by culturing the cells in a culture medium comprising an effective amount of one or more lipids or lipid metabolites selected from the group consisting of: linoleic acid, arachidonic acid, and prostaglandin E2, or derivatives and/or precursors thereof. The present disclosure also provides culture medium for use in producing therapeutic proteins with increased productivity, wherein the medium comprises one or more lipids or lipid metabolites selected from the group consisting of: linoleic acid, arachidonic acid, and prostaglandin E2, or derivatives and/or precursors thereof.

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