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SUPPORTING INFECTIOUS DISEASE RESEARCH

Cutibacterium acnes, Strain HL110PA1 (Deposited as *Propionibacterium acnes*, HL110PA1)

Catalog No. HM-552

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Bacteria Classification: Propionibacteriaceae, Cutibacterium

<u>Species</u>: *Cutibacterium acnes* (Previously referred to as *Propionibacterium acnes*, this family has been reclassified and the family designation on the vial label refers to the old nomenclature.)¹

Strain: HL110PA1

- <u>Original Source</u>: *Cutibacterium acnes (C. acnes)*, strain HL110PA1 was isolated from human skin.²
- <u>Comments</u>: *C. acnes*, strain HL110PA1 (<u>HMP ID 9575</u>) is a reference genome for <u>The Human Microbiome Project</u> (HMP). HMP is an initiative to identify and characterize human microbial flora. The complete genome of *C. acnes*, strain HL110PA1 was sequenced at the Genome Institute at <u>Washington University</u> (GenBank: <u>ADZE00000000</u>).
- <u>Note</u>: HMP material is taxonomically classified by the depositor. Quality control of these materials is only performed to demonstrate that the material distributed by BEI Resources is identical to the deposited material.

C. acnes is a non-motile, Gram-positive, anaerobic rod that resides in hair follicles of the human skin.^{3,4} It may cause severe infections at various body sites, particularly in the presence of a foreign body.⁴

Material Provided:

Each vial contains approximately 0.5 mL of bacterial culture in Modified Reinforced Clostridial broth supplemented with 10% glycerol.

<u>Note</u>: If homogeneity is required for your intended use, please purify prior to initiating work.

Packaging/Storage:

HM-552 was packaged aseptically in cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

Growth Conditions:

Media:

Modified Reinforced Clostridial broth or equivalent

Tryptic Soy agar with 5% defibrinated sheep blood or equivalent

Incubation:

Temperature: 37°C

Atmosphere: Anaerobic

Propagation:

- 1. Keep vial frozen until ready for use, then thaw.
- 2. Transfer the entire thawed aliquot into a single tube of broth.
- 3. Use several drops of the suspension to inoculate an agar slant and/or plate.
- 4. Incubate the tube, slant and/or plate at 37°C for 2 days. Broth cultures should include shaking.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH as part of the Human Microbiome Project: *Cutibacterium acnes*, Strain HL110PA1, HM-552."

Biosafety Level: 1

Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. <u>Biosafety in Microbiological and Biomedical Laboratories</u>. 6th ed. Washington, DC: U.S. Government Printing Office, 2020; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

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References:

- Scholz, C. F. P., and M. Kilian. "The Natural History of *Cutaneous Propionibacteria*, and Reclassification of Selected Species within the Genus *Propionibacterium* to the Proposed Novel Genera *Acidipropionibacterium* gen. nov., *Cutibacterium* gen. nov. and *Pseudopropionibacterium* gen. nov." <u>Int. J. Syst. Evol.</u> <u>Microbiol.</u> 66 (2016): 4422-4432. PubMed: 27488827.
- 2. <u>HMP 9575</u> (*Cutibacterium acnes*, strain HL110PA1)
- Zaid, M., et al. "Cutibacterium (formerly Propionibacterium) acnes Clavicular Infection." J. Bone Jt. Infect. 4 (2019): 40-49. PubMed: 30755847.
- Elston, M. J., et al. "Cutibacterium acnes (formerly Proprionibacterium acnes) and Shoulder Surgery." <u>Hawaii J. Health Soc. Welf.</u> 78 (2019): 3-5. PubMed: 31773103.

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