

MP Biomedicals, LLC

29525 Fountain Parkway Solon, Ohio 44139 Telephone: 440/337-1200 Toll Free: 800/854-0530 Fax: 440/337-1180 web: http://www.mpbio.com

## **Certificate of Analysis**

Product Description: beta-Estradiol

Catalog Number: 101656

Lot: Q4609

**Formula:** C<sub>18</sub>H<sub>24</sub>O<sub>2</sub>

**CAS #:** 50-28-2

Physical Description: White Powder

Formula Weight: 272.39

Storage: Room Temperature, store under nitrogen

Test	Specification	Result
Identity Test	Passes	Passes
Assay	<u>&gt;</u> 98%	99.4% (anyh)
FTIR	Conforms to Standard	Conforms to Standard
Melting Point	173 - 179°C	176.7-179.0°C
Optical Rotation	+76° to +83°	79.7°

Loss on Drying: 2.90%

TLC Solvent System: Rf=0.23 (in 2:1 Hexane: Ethyl Acetate)

TLC examined under: UV TLC Visualized by: pTSA/lodine

TLC: Homogenous (Purity: 98% or greater)

Single impurities: 0.14% Total impurities: 0.63%

Solubility: Soluble in most organic solvents Recommended Retest Date: 07/20/2019

07/28/2016 - John Huang, PhD

MP Biomedicals, LLC. Quality Control Manager

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