



## Certificate of Analysis

### Tamoxifen Citrate USP

**Catalog Number:** TC1003  
**Lot Number:** 0511801  
**CAS Number:** 54965-24-1  
**Synonym(s):** (Z)-1-(p-Dimethylaminoethoxyphenyl)-1,2-diphenyl-1-butene  
**Molecular Formula:**  $C_{26}H_{29}NO \cdot C_6H_8O_7$   
**Molecular Weight:** 563.60  
**Storage:** 2°C - 8°C  
**Date of Manufacture:** March 11, 2018  
**Retest Date:** March 10, 2021

Test	Specification	Result
Appearance	White Crystalline	Conforms
Assay	99.0 – 101.0%	99.3%
Identification by HNMR	Consistent with structure	Conforms
Identification	IR , UV conform	Conforms
Solubility (25mg/mL MeOH)	Clear & colorless	Conforms
Moisture (LOD)	≤ 0.50%	0.36%
Residue on Ignition	≤ 0.20%	0.09%
Iron	≤ 0.005%	< 0.005%
Heavy Metals	≤ 10ppm	< 10ppm
Related substances		
Individual	≤ 0.5%	0.24%
Total	≤ 1.0%	0.28%
E-isomer ( <i>cis</i> form)	≤ 0.3%	0.17%
Organic Volatile Impurities	Conforms	Conforms
This product meets USP 30 specifications.		

Approved by:

Date: May 15, 2018

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