

## Certificate of Analysis

Date of Testing: 2024-12-25 14:09:54

Date of Next Testing: 2028-12-24 14:09:54

Product Name: **1,4-Piperazinediethanesulfonic acid(PIPES)**

CAS Number: 5625-37-6

Specifications & Purity: for cell culture, ≥99%

Lot #: L2420090

SKU # **P105092**

Version **0**

Analysis #: **036266**

Storage Temperature: Room temperature

| Parameter                                        | Limit Values                                   | Result                                         |
|--------------------------------------------------|------------------------------------------------|------------------------------------------------|
| UV Absorbance 290nm(20% in 1N NaOH)              | 0-0.1                                          | 0.07                                           |
| Endonuclease Detection                           | 0-0.1 (EU/g)                                   | 0.08 EU/g                                      |
| Heavy metal (as Pb)                              | 0-5 (ppm)                                      | 0.00 ppm                                       |
| standard plate count                             | 0-100 (cfu/g)                                  | 95.00 cfu/g                                    |
| Purity (Titration by H2SO4)                      | 99-100 (%)                                     | 99.66 %                                        |
| Appearance (P105092)                             | White Crystals, Powder or Crystalline<br>Solid | White Crystals, Powder or Crystalline<br>Solid |
| Cell Culture Test                                | pass                                           | Pass                                           |
| Infrared spectrum                                | Conforms to Structure                          | Conforms to Structure                          |
| RNASE, DNASE, NICKASE AND PROTEASE               | none detected                                  | none detected                                  |
| Solubility in 1N NaOH , Colorless,Clear,250mg/ml | pass                                           | Pass                                           |
| Proton NMR spectrum                              | Conforms to Structure                          | Conforms to Structure                          |



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