

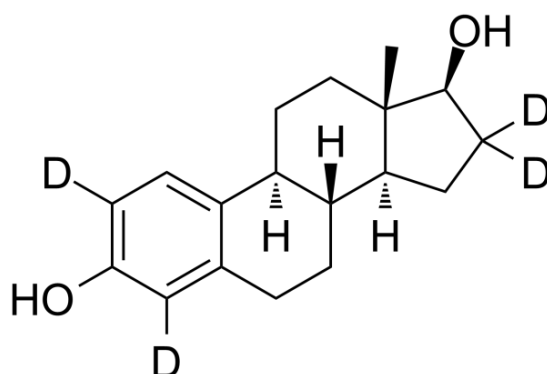
Certificate of Analysis

Product Name: Estradiol-d4
Cat. No.: GC63643
Batch No.: 2
Chemical Name:

PHYSICAL AND CHEMICAL PROPERTIES

Cas. No.: 66789-03-5
Molecular Formula: $C_{18}H_{20}D_4O_2$
Molecular Weight: 276.41
Storage: Store at -20°C

Chemical Structure:



ANALYTICAL DATA

Appearance: A solid
 1H NMR Spectrum: Consistent with structure
LCMS: Consistent with structure
Purity(LCMS): 99.55%
Isotopic Enrichment: 95.70%
Additional Information: d1=0.27%, d2=3.03%, d4=94.14%
Conclusion: The product has been tested and complies with the given specifications.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA