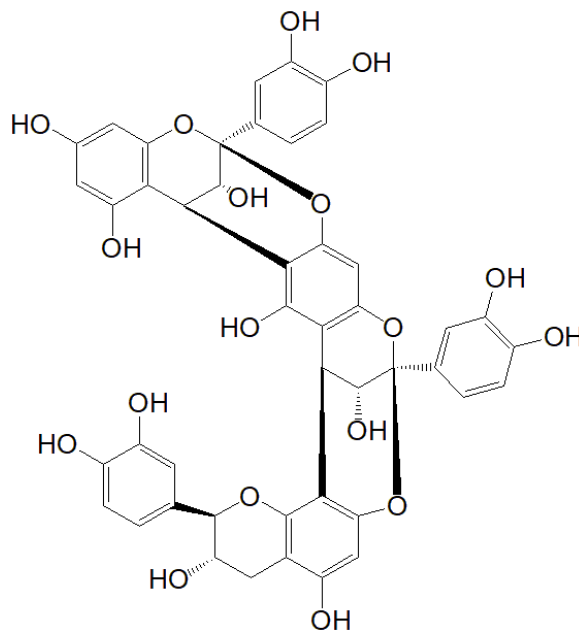


Certificate of Analysis



| | |
|-------------------------|--|
| PRODUCT | <i>Procyanidin Trimer B (A-type)</i> |
| BATCH # | PA-030-088-316 |
| ASSAY METHOD | HPLC, ¹ H-NMR |
| REPORT DATE | 2019-12-11 |
| CHEMICAL NAME | E-(2β-O-7, 4β-8)-E-(2β-O-7, 4β-8)-C |
| OTHER NAMES | Procyanidin Trimer (2 A-type), 4, b, Aesculitannin D |
| CHEMICAL FORMULA | C ₄₅ H ₃₄ O ₁₈ |
| MOLECULAR WEIGHT | 862.74 g/mol |
| CAS REG. # | n/a |
| STORAGE | <-20 degrees C; dark |
| EXPIRATION DATE | 2020-12-11 |
| NOTES | Add additional notes. |

Analytical Data

| TEST | METHOD | SPECIFICATION | RESULT |
|--------------------|-----------------|---------------|----------|
| HPLC | 210 nm | n/a | 96.0% |
| ¹ H-NMR | | Conforms | Conforms |
| Residual Solvents | | < 0.2% | |
| Appearance | Pale tan powder | | |

Signed: Jan Glinski, Ph.D.
 Planta Analytica LLC
 December 11, 2019

