

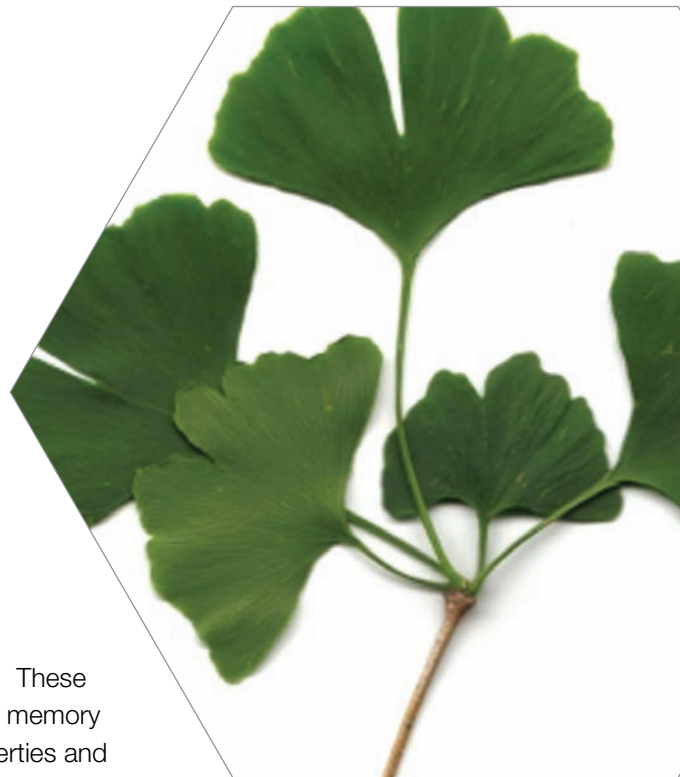
0025 - Ginkgo for Flavonoids by HPLC

Botanical Name: *Ginkgo biloba*

Common Names: Ginkgo

Plant Description:

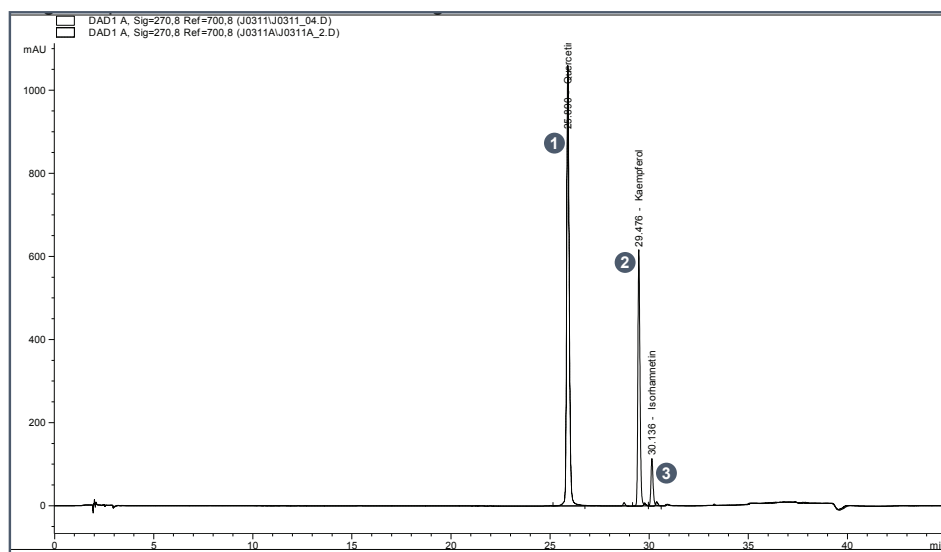
Ginkgo biloba is one of the oldest living tree species and has been prized for its medicinal uses. Trees can reach heights of 20-35m, with some specimens reaching 50m. The tree has an erratic pattern of branches and is usually deep rooted and resistant to elemental damage. Leaves turn bright yellow in autumn and fall within 2 weeks. Ginkgo's insect and disease resistant characteristics make this species long lived, with some specimens estimated at 2,500 years old.



Therapeutic Use Overview:

Extracts of Ginkgo leaves contain flavonoid glycosides and terpenoids. These compounds are believed to have nootropic properties and are used as memory and concentration enhancers. The compounds have antioxidant properties and increase blood flow in the brain, lending them to use in treating dementia as well as Alzheimer's disease. Laboratory studies have shown that the flavonoids present in the extracts can also protect the nerves, heart muscle and retina from damage.

Representative HPLC Analysis: Mixed Standard Solution



Analytes:

① Quercetin, ② Kaempferol, ③ Isorhamnetin

Instrument Parameters

Column: Phenomenex Luna C(18)2 250 x 4.6 mm, 5 µm particle size, or equivalent

Detection: UV-Vis @ 270 ± 8 nm

Flow Rate: 1.5 mL/min

Injection Volume: 10 µL

Temperature: 40°C

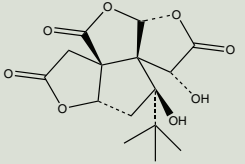
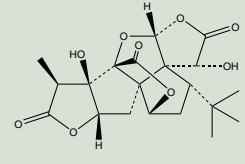
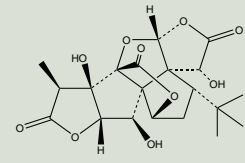
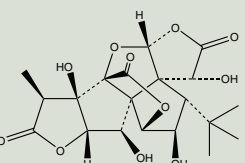
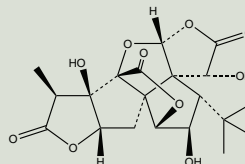
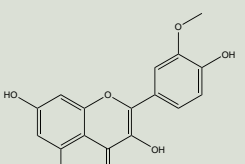
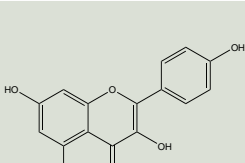
Mobile Phase A: 10 mM Ammonium Acetate, pH 5.0

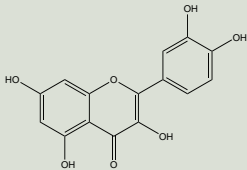
Mobile Phase B: Acetonitrile: Methanol (9:1)

Gradient Program

Time (min)	%A	%B
0	85	15
20	75	25
30	55	45
35	5	95
37	5	95
40	85	15
45	85	15

Phytochemical Reference Standards

Product Description And Details	Product ID	Qty
 <p>BILOBALIDE Grade: AHP CAS#: [33570-04-6] Chemical Formula: $C_{15}H_{18}O_8$ FW: 326.3</p>	ASB-00002274-005 ASB-00002274-010 ASB-00002274-025	5mg 10mg 25mg
 <p>GINKGOLIDE A Grade: AHP CAS#: [15291-75-5] Chemical Formula: $C_{20}H_{24}O_9$ FW: 408.4</p>	ASB-00007176-005 ASB-00007176-010 ASB-00007176-025	5mg 10mg 25mg
 <p>GINKGOLIDE B Grade: AHP CAS#: [15291-77-7] Chemical Formula: $C_{20}H_{24}O_{10}$ FW: 424.4</p>	ASB-00007181-005 ASB-00007181-010 ASB-00007181-025	5mg 10mg 25mg
 <p>GINKGOLIDE C Grade: AHP CAS#: [15291-76-6] Chemical Formula: $C_{20}H_{24}O_{11}$ FW: 440.4</p>	ASB-00007179-005 ASB-00007179-010 ASB-00007179-025	5mg 10mg 25mg
 <p>GINKGOLIDE J Grade: P CAS#: [107438-79-9] Chemical Formula: $C_{20}H_{24}O_{10}$ FW: 424.4</p>	ASB-00007186-005 ASB-00007186-010 ASB-00007186-025	5mg 10mg 25mg
 <p>ISORHAMNETIN Grade: P CAS#: [480-19-3] Chemical Formula: $C_{16}H_{12}O_7$ FW: 316.28</p>	ASB-00009520-010 ASB-00009520-025 ASB-00009520-100	5mg 10mg 100mg
 <p>KAEMPFEROL Grade: AHP CAS#: [520-18-3] Chemical Formula: $C_{15}H_{10}O_6$ FW: 286.24</p>	ASB-00011020-005 ASB-00011020-010 ASB-00011020-025	5mg 10mg 25mg

	QUERCETIN	ASB-00017030-005	5mg
	Grade: AHP	ASB-00017030-010	10mg
	CAS#: [117-39-5]	ASB-00017030-025	25mg
	Chemical Formula: C ₁₅ H ₁₀ O ₇	ASB-00017030-100	100mg
	FW: 302.24		

Reference Standard Kits

Product Name	Contents	Product ID	Qty
GINKGO FLAVONOIDS STANDARDS KIT	ISORHAMNETIN(P)	KIT-00007184-010	3 x 10mg vials
	KAEMPFEROL(AHP)	KIT-00007184-025	3 x 25mg vials
	QUERCETIN(AHP)		
GINKGO TERPENOID STANDARDS KIT	BILOBALIDE(AHP)	KIT-00007187-005	5 x 5mg vials
	GINKGOLIDE A(AHP)	KIT-00007187-010	5 x 10mg vials
	GINKGOLIDE B(AHP)	KIT-00007187-025	5 x 25mg vials
	GINKGOLIDE C(AHP)		
	GINKGOLIDE J(P)		

Additional Related Compounds

Product Description And Details	Product ID	Qty
ASTRAGALIN(KAEMPFEROL-3-O-GLUCOSIDE) Grade: P CAS#: [480-10-4] Chemical Formula: C ₂₁ H ₂₀ O ₁₁ FW: 448.38	ASB-00011055-005	5mg
	ASB-00011055-010	10mg
ASTRAGALIN(KAEMPFEROL-3-O-GLUCOSIDE) Grade: SH CAS#: [480-10-4] Chemical Formula: C ₂₁ H ₂₀ O ₁₁ FW: 448.38	ASB-00011056-005	5mg