

1837  
2017  
YEARSHELLENIC REPUBLIC  
National and Kapodistrian  
University of AthensDate: 24<sup>th</sup> May 2017**CERTIFICATE OF ANALYSIS**

Product	Pure Happiness	
<b>Herbal content</b>	Mountain tea ( <i>Sideritis spp.</i> ) Lemon balm ( <i>Melissa officinalis</i> ) Sage ( <i>Salvia spp.</i> ) Mint ( <i>Mentha spp.</i> )	
<b>Recommended dose</b>	1 g	
	Method	Results
<b>Extract preparation</b>	Hot water extraction	Yield of extraction: 23.9%
<b>Quality control – Chemical analysis</b>	High performance thin layer chromatography (HPTLC)	Polyphenols, Flavonoids, Tannins
	Total Phenolic Content (Folin Ciocaleu's method)	42.0 mg GA/dose [gallic acid equivalent (mg) / dose (1 g dry material)]
	Total Flavonoid Content (Aluminium chloride colorimetric method)	11.7 mg Quercetin/dose [quercetin equivalent (mg) / dose (1 g dry material)]
<b>Total Antioxidant Capacity</b>	DPPH scavenging colorimetric method	200 ug extract/ml: 88.9% inhibition of DPPH free radical
		100 ug extract/ml: 88.2% inhibition of DPPH free radical
<b>Comments</b>	<b>PURE HAPPINESS</b> is characterized by high phenolic content and strong antioxidant capacity that is correlated with the contained herbs like mountain tea which is rich in flavonoids and tannins, as well as mint and sage which are rich in rosmarinic acid and other phenolic compounds.	

Validated by:

Dr. N. Fokialakis

