



Certificate of Analysis

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Sample Name	Immunity & Allergy Supplement	Client ID	Earth Buddy Pet
Sample Type	Fruit	Analysis Date	9/20/2023
Sample Batch ID	#075Blend2P	Instrument ID	Agilent HPLC-DAD
Tryptomics ID	M-045	Assay ID	4 Compound Cordyceps

Cordycepin		Adenosine		Tryptophan		Tryptamine	
Weight %	Concentration (mg/g)	Weight %	Concentration (mg/g)	Weight %	Concentration (mg/g)	Weight %	Concentration (mg/g)
0.094	0.943	0.005	0.053	0.005	0.049	LOD	LOD
<p>About Cordycepin: Cordycepin is a nucleoside analog found in <i>C. sinensis</i> that acts as a polyadenylation inhibitor when converted to cordycepin triphosphate, which inhibits ATP-dependent DNA and RNA synthesis.¹ Cordycepin has a broad spectrum of biological activities, including anti-proliferative, pro-apoptotic, and anti-inflammatory effects.^{1,2,3}</p>		<p>About Adenosine: Adenosine is a purine nucleoside composed of adenine and ribose linked by a glycosidic linkage. It is an endogenous ligand of a family of four adenosine receptors, which serve diverse roles related to smooth muscle tone, central nervous system regulation, and cardiac function.</p>		<p>About Tryptophan: Tryptophan is an essential amino acid vital in synthesizing serotonin and melatonin in fungi, plants, and animals. It contributes to the formation of indole alkaloids like ajmalicine, psilocybin, strictosidine, and catharanthine. In mammals, tryptophan undergoes several metabolic pathways and significantly influences health aspects like mood, sleep, and immune function.</p>		<p>About Tryptamine: Tryptamine is an indole alkaloid and intermediate in the biosynthesis of serotonin and the phytohormone melatonin in plants.^{1,2} It increases the levels of the terpenoid indole alkaloids ajmalicine, strictosidine, and catharanthine in cultures of <i>C. roseus</i>.³ Tryptamine is also a product of tryptophan metabolism in mammals.⁴</p>	



LOD = Limit of Detection, ND = Not Detected

This certificate of analysis is for research and development purposes only. Please email questions to cking@tryptomics.com