



Cannabinoids Targeted Panel

Cannabinoids

Endocannabinoids are endogenous lipid-based neurotransmitters that bind to cannabinoid receptors (CBRs). Endocannabinoids are naturally produced by the human body. They have been shown to regulate a wide range of physiological and cognitive processes, including fertility, pregnancy, pre-and postnatal development, motor control, appetite, food intake, pain sensation, mood, memory acquisition, and learning. In humans, exercise has been shown to increase endocannabinoid levels in plasma, mainly because endocannabinoids can effectively cross the blood-brain barrier (BBB) and contribute to exercise-induced euphoria in humans. Disorders of the endocannabinoid system have been related to several neuro-inflammatory diseases, such as Alzheimer's disease, Parkinson's disease, Huntington's disease, and multiple sclerosis.

Applications

- Inflammation
- Neuroscience

This panel is for Research Use Only and is not to be used for diagnostic purposes.

Contact us to get started

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LLOQ*		
Metabolite	Plasma (ng/mL)	
Endocannabinoids and related molecules		
2-Arachidonoyl Glycerol (2-AG)	0.842	
2-Arachidonyl Glycerol ether (2-AG Ether)	1.77	
Arachidonoyl Ethanolamide (AEA)	0.0946	
Arachidonoyl Glycine (NAGly)	0.0946	
Arachidonoyl Serotonin (AA-5HT)	0.0946	
Dihomo-ɣ-Linolenoyl Ethanolamide (DLEA)	0.0946	
Docosatetraenoyl Ethanolamide (DEA)	0.0946	
N-Arachidonoyl Dopamine (NADA)	0.189	
N-Oleoyl Dopamine (ODA)	0.189	
N-Palmitoyl Dopamine (PDA)	0.142	
Linoleoyl Ethanolamide (LEA)	0.0709	
Phytocannabinoids		
(-)-Δ8-Tetrahydrocannabinol (Δ8-THC)	0.0946	
(±)-Δ9-Tetrahydrocannabinol (Δ9-THC)	0.189	
Cannabichromene (CBC)	0.189	
Cannabidiol (CBD)	0.0946	
Cannabidiolic acid (CBDA)	0.0946	
Cannabidivarin (CBDV)	0.189	
Cannabidivarinic Acid (CBDVA)	0.0946	
Cannabigerol (CBG)	0.0946	
Cannabigerolic acid (CBGA)	1.77	
Cannabinol (CBN)	0.0946	
Δ9-Tetrahydrocannabinolic acid A (THCA-A)	0.0946	
Abnormal Cannabidiol (Abn-CBD)	0.0946	
Hexocannabitriol	0.0946	
Tetrahydrocannabivarin (THCV)	0.0946	
Cannabivarin (CBV)	0.0946	
Human Metabolites of Phytocannabinoids		
(±)-11-Hydroxy-Δ9-THC (11-OH-THC)	0.0946	
(±)-11-nor-9-Carboxy-Δ9- THC (11-COOH-THC)	0.0946	
7-Carboxy cannabidiol (7-COOH- CBD)	0.0946	
7-Hydroxy cannabidiol (7-OH-CBD)	0.0946	
(–)-6α-hydroxy Cannabidiol (6α-OH-CBD)	0.189	

^{*}Lower Limit of Quantitation (LLOQ) varies for each sample type.

Analysis Method and Instrumentation

LC-MS/MS (Agilent 1290 UHPLC/Sciex QTrap 5500 and 6500+)

Sample Type and Required Amounts

Sample Type	Sample Requirement
Plasma	250 μL

Others on request.