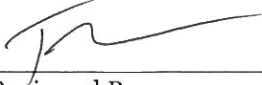





Certificate of Analysis
September 23, 2020

Sample ID: FP-20-0551
Product Name: CV Defense Immunity Capsule – 60ct
Lot #: 09524195F
Expiration: 07/22
Storage Conditions: Room temperature, cool, dry place.

Criteria	Specification	Test Method	cGMP Requirements	Results
Fill Appearance	Free-flowing powder	Gross Organoleptic	Composition Identity	Complies
Color	White with some tan specs	Gross Organoleptic	Identity	Complies
Aroma	Umami	Gross Organoleptic	Identity	Complies
Capsule size	“00”	Gross Organoleptic	Identity	Complies
Count	NLT 60 units	gravimetric	Composition	Complies
Micro				
TAPC	<10,000 cfu/g	3M Petrifilm	Purity	Complies
Total Yeast & Mold	<1000 cfu/g	3M Petrifilm	Purity	Complies
E.Coli	Negative in 10g	3M Petrifilm	Purity	Complies
Salmonella	Negative in 10g	3M Petrifilm	Purity	Complies
Coliforms	<1000 cfu/g	3M Petrifilm	Purity	Complies
Pesticide Residue	Passes USP chapter 561	HPLC-MS	Limits on contaminants	Complies
Residual Solvents	Passes USP chapter 467- Residual solvents	HS-GC	Limits on contaminants	Complies
Heavy Metals				
Arsenic	NMT 5 ppm	ICP MS	Limits on contaminants	Complies
Cadmium	NMT 3 ppm	ICP MS	Limits on contaminants	Complies
Lead	NMT 0.4 ppm	ICP MS	Limits on contaminants	Complies
Mercury	NMT 1 ppm	ICP MS	Limits on contaminants	Complies


Reviewed By
Tim Hitchman
Director of Operations
23SEP2020
Date


Approved By
Douglas MacKay
Senior VP of Scientific & Regulatory
23SEP2020
Date

Certificate of Analysis

CV Sciences Inc

10070 Barnes Canyon Rd
San Diego California 92121 United States

Sample Name:	FP-20-0551 CV Defense Immunity Capsule - 60ct EXP: 0722	Eurofins Sample:	9776557
Project ID	CV_SCIENCE-20200818-0013	Receipt Date	19-Aug-2020
PO Number	CVD	Receipt Condition	Ambient temperature
Lot Number	09524195F	Login Date	18-Aug-2020
Sample Serving Size	2 Cap	Date Started	19-Aug-2020
		Sampled	Sample results apply as received
		Number Compositd	20
		Online Order	12836-13FED64F

Analysis	Limit	Result	Pass/Fail
GC-MS/MS and LC-MS/MS Multi-Residue Analysis			
Acephate	0.1 mg/kg	<0.1 mg/kg	Pass
Alachlor	0.05 mg/kg	<0.05 mg/kg	Pass
Aldrin and dieldrin (sum of)	0.05 mg/kg	<0.05 mg/kg	Pass
Azinphos-ethyl	0.1 mg/kg	<0.1 mg/kg	Pass
Azinphos-methyl	1 mg/kg	<1 mg/kg	Pass
Bromophos-ethyl	0.05 mg/kg	<0.05 mg/kg	Pass
Bromophos-methyl	0.05 mg/kg	<0.05 mg/kg	Pass
Bromopropylate	3 mg/kg	<3 mg/kg	Pass
Chlordane (sum of cis- and trans- isomers and oxychlordane)	0.05 mg/kg	<0.05 mg/kg	Pass
Chlorfenvinphos	0.5 mg/kg	<0.5 mg/kg	Pass
Chlorpyrifos-ethyl	0.2 mg/kg	<0.2 mg/kg	Pass
Chlorpyrifos-methyl	0.1 mg/kg	<0.1 mg/kg	Pass
Chlorthal-dimethyl	0.01 mg/kg	<0.01 mg/kg	Pass
Cyfluthrin (sum of isomers)	0.1 mg/kg	<0.1 mg/kg	Pass
Cyhalothrin, lambda-	1 mg/kg	<1 mg/kg	Pass
Cypermethrin (sum of isomers)	1 mg/kg	<1 mg/kg	Pass
DDT (sum of o,p'-DDT, p,p'-DDT, o,p'-DDE, p,p'-DDE, o,p'-DDD, and p,p'-DDD)	1 mg/kg	<1.0 mg/kg	Pass
Deltamethrin	0.5 mg/kg	<0.5 mg/kg	Pass
Diazinon	0.5 mg/kg	<0.5 mg/kg	Pass
Dichlofluanid	0.1 mg/kg	<0.1 mg/kg	Pass
Dichlorvos	1 mg/kg	<1 mg/kg	Pass
Dicofol	0.5 mg/kg	<0.5 mg/kg	Pass
Dimethoate and omethoate (sum of)	0.1 mg/kg	<0.1 mg/kg	Pass
Endosulfan (sum of isomers and endosulfan sulfate)	3 mg/kg	<3.0 mg/kg	Pass

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Project ID	CV_SCIENCE-20200818-0013	Receipt Date	19-Aug-2020
PO Number	CVD	Receipt Condition	Ambient temperature
Lot Number	09524195F	Login Date	18-Aug-2020
Sample Serving Size	2 Cap	Date Started	19-Aug-2020
		Sampled	Sample results apply as received
		Number Compositied	20
		Online Order	12836-13FED64F

Analysis	Limit	Result	Pass/Fail
GC-MS/MS and LC-MS/MS Multi-Residue Analysis			
Endrin	0.05 mg/kg	<0.05 mg/kg	Pass
Ethion	2 mg/kg	<2 mg/kg	Pass
Etrimphos	0.05 mg/kg	<0.05 mg/kg	Pass
Fenchlorphos (sum of fenchlorphos and fenchlorphos-oxon)	0.1 mg/kg	<0.1 mg/kg	Pass
Fenitrothion	0.5 mg/kg	<0.5 mg/kg	Pass
Fenpropathrin	0.03 mg/kg	<0.03 mg/kg	Pass
Fensulfothion (sum of fensulfothion, fensulfothion-oxon, fensulfothion-oxon sulfone and fensulfothion sulfone)	0.05 mg/kg	<0.05 mg/kg	Pass
Fenthion (sum of fenthion, fenthion-oxon, fenthion-oxon sulfone, fenthion-oxon sulfoxide, fenthion sulfone and fenthion sulfoxide)	0.05 mg/kg	<0.05 mg/kg	Pass
Fenvalerate	1.5 mg/kg	<1.5 mg/kg	Pass
Flucythrinate	0.05 mg/kg	<0.05 mg/kg	Pass
Fluvalinate, tau-	0.05 mg/kg	<0.05 mg/kg	Pass
Fonofos	0.05 mg/kg	<0.05 mg/kg	Pass
Heptachlor (sum of heptachlor and cis- and trans-heptachlor epoxides)	0.05 mg/kg	<0.05 mg/kg	Pass
Hexachlorobenzene	0.1 mg/kg	<0.1 mg/kg	Pass
Hexachlorocyclohexane isomers (other than gamma)	0.3 mg/kg	<0.3 mg/kg	Pass
Lindane (gamma-hexachlorocyclohexane)	0.6 mg/kg	<0.6 mg/kg	Pass
Malathion and malaoxon (sum of)	1 mg/kg	<1 mg/kg	Pass
Mecarbam	0.05 mg/kg	<0.05 mg/kg	Pass
Methacriphos	0.05 mg/kg	<0.05 mg/kg	Pass
Methamidophos	0.05 mg/kg	<0.05 mg/kg	Pass
Methidathion	0.2 mg/kg	<0.2 mg/kg	Pass

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Project ID	CV_SCIENCE-20200818-0013	Receipt Date	19-Aug-2020
PO Number	CVD	Receipt Condition	Ambient temperature
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Sample Serving Size	2 Cap	Date Started	19-Aug-2020
		Sampled	Sample results apply as received
		Number Compositied	20
		Online Order	12836-13FED64F

Analysis	Limit	Result	Pass/Fail
GC-MS/MS and LC-MS/MS Multi-Residue Analysis			
Methoxychlor	0.05 mg/kg	<0.05 mg/kg	Pass
Mirex	0.01 mg/kg	<0.01 mg/kg	Pass
Monocrotophos	0.1 mg/kg	<0.1 mg/kg	Pass
Parathion-ethyl and paraoxon-ethyl (sum of)	0.5 mg/kg	<0.5 mg/kg	Pass
Parathion-methyl and paraoxon-methyl (sum of)	0.2 mg/kg	<0.2 mg/kg	Pass
Pendimethalin	0.1 mg/kg	<0.1 mg/kg	Pass
Pentachloranisol	0.01 mg/kg	<0.01 mg/kg	Pass
Permethrin (sum of isomers)	1 mg/kg	<1 mg/kg	Pass
Phosalone	0.1 mg/kg	<0.1 mg/kg	Pass
Phosmet	0.05 mg/kg	<0.05 mg/kg	Pass
Piperonyl butoxide	3 mg/kg	<3 mg/kg	Pass
Pirimiphos-ethyl	0.05 mg/kg	<0.05 mg/kg	Pass
Pirimiphos-methyl (sum of pirimiphos-methyl and N-desethyl-pirimiphos-methyl)	4 mg/kg	<4 mg/kg	Pass
Procymidone	0.1 mg/kg	<0.1 mg/kg	Pass
Profenophos	0.1 mg/kg	<0.1 mg/kg	Pass
Prothiophos	0.05 mg/kg	<0.05 mg/kg	Pass
Pyrethrum (sum of cinerin I, cinerin II, jasmolin I, jasmolin II, pyrethrin I, and pyrethrin II)	3 mg/kg	<3 mg/kg	Pass
Quinalphos	0.05 mg/kg	<0.05 mg/kg	Pass
Quintozone (sum of quintozone, pentachloroaniline and methyl pentachlorophenyl sulfide)	1 mg/kg	<1 mg/kg	Pass
S-421	0.02 mg/kg	<0.02 mg/kg	Pass
Tecnazene	0.05 mg/kg	<0.05 mg/kg	Pass
Tetradifon	0.3 mg/kg	<0.3 mg/kg	Pass
Vinclozolin	0.4 mg/kg	<0.4 mg/kg	Pass

Certificate of Analysis

CV Sciences Inc

10070 Barnes Canyon Rd
San Diego California 92121 United States

Method References

Testing Location

GC-MS/MS and LC-MS/MS Multi-Residue Analysis (EC_PS01_S)

Eurofins Central Analytical Laboratories

2219 Lakeshore Dr Suite 500 New Orleans, LA 70122 USA

Official Methods of Analysis, AOAC Official Method 2007.01, Pesticide Residues in Foods by Acetonitrile Extraction and Partitioning with Magnesium Sulfate, AOAC INTERNATIONAL (modified).

CEN Standard Method EN 15662: Food of plant origin - Determination of pesticide residues using GC-MS and/or LC-MS/MS following acetonitrile extraction/partitioning and clean-up by dispersive SPE - QuEChERS method.

Please contact us if you want a complete listing of all compounds determined during testing.

Testing Location(s)

Released on Behalf of Eurofins by

Food Integrity Innovation-Madison

Edward Ladwig - President Eurofins Food Chemistr

Eurofins Food Chemistry Testing Madison, Inc.
3301 Kinsman Blvd
Madison WI 53704
800-675-8375

These results apply only to the items tested. This certificate of analysis shall not be reproduced, except in its entirety, without the written approval of Eurofins.

Certificate of Analysis

CV Sciences Inc

10070 Barnes Canyon Rd
San Diego California 92121 United States

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Project ID	CV_SCIENCE-20200818-0013	Receipt Date	19-Aug-2020
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		Number Compositied	20
		Online Order	12836-13FED64F

Analysis	Limit	Result	Pass/Fail
Bromide			
Bromide, inorganic (calculated as Bromide Ion)	125 mg/kg	<125 mg/kg	Pass

Method References

Testing Location

Bromide (EC_MEBR_S)

Eurofins Central Analytical Laboratories

2219 Lakeshore Dr Suite 500 New Orleans, LA 70122 USA

Community Reference Laboratory for Single Residue Methods, CVUA, Stuttgart, Schaglandstr 3/2, 70736 Fellbach, Germany.

T. Stijve, Gas Chromatographic Determination of Inorganic Bromide Residues - a Simplified Procedure, Dtsch. Lebenm Rundsch 77 99-101 (1981).

Deutsche Forschungsgemeinschaft (DFG), Manual of Pesticide Residue Analysis, Volume I by Verlag Chemie, 1987 ISBN 3-527-27010-8

Testing Location(s)

Released on Behalf of Eurofins by

Food Integrity Innovation-Madison

Edward Ladwig - President Eurofins Food Chemistr

Eurofins Food Chemistry Testing Madison, Inc.
3301 Kinsman Blvd
Madison WI 53704
800-675-8375

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Project ID	CV_SCIENCE-20200818-0013	Receipt Date	19-Aug-2020
PO Number	CVD	Receipt Condition	Ambient temperature
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Sample Serving Size	2 Cap	Date Started	19-Aug-2020
		Sampled	Sample results apply as received
		Number Composited	20
		Online Order	12836-13FED64F

Analysis	Limit	Result	Pass/Fail
Total Content of Dithiocarbamates (DTCs) expressed as CS2			
Total Content of Dithiocarbamates (DTCs) expressed as CS2	2 mg/kg	<2.00 mg/kg	Pass

Method References

Testing Location

Total Content of Dithiocarbamates (DTCs) expressed as CS2 (EC_DTC_S)

Eurofins Central Analytical Laboratories

2219 Lakeshore Dr Suite 500 New Orleans, LA 70122 USA

Hayama, T. and Takada, M., "Simple and Rapid method for the determination of Ethylenebisdithiocarbamate Fungicides in Fruits and Vegetables Using Liquid Chromatography with Tandem Mass Spectrometry," *Anal. Bioanal. Chem.*, 392:969-976 (2008).

Testing Location(s)

Released on Behalf of Eurofins by

Food Integrity Innovation-Madison

Edward Ladwig - President Eurofins Food Chemistr

Eurofins Food Chemistry Testing Madison, Inc.
3301 Kinsman Blvd
Madison WI 53704
800-675-8375

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ANALYZED BY:

Anresco Laboratories
1375 Van Dyke Avenue,
San Francisco, CA 94124
C8-0000052-LIC

MANUFACTURER:

CV Sciences
10070 Barnes Canyon Road suite 100
SAN DIEGO 92121
n/a



SAMPLE INFORMATION

Sample No.: 1055493
Product Name: FP-20-0551 CV Defense Immunity Capsule - 60ct EXP: 07/22
Matrix: Other
Batch #: 09524195F

Date Collected: 08/19/2020
Date Received: 08/19/2020
Date Reported: 08/24/2020

TEST SUMMARY

Microbiological Screen: ✔ Pass

Residual Solvent Screen: ✔ Pass

Heavy Metal Screen: ✔ Pass

Overall: ✔ Pass

MICROBIOLOGICAL SCREEN ✔ Pass

Analysis

Standard Plate Count
Yeast
Mold
Coliforms
Escherichia coli
Pseudomonas
Salmonella

Method

FDA BAM
FDA BAM
FDA BAM
FDA BAM - ECC AGAR
FDA BAM - ECC AGAR
FDA BAM
AOAC 2016.01

Finding

<10 cfu/g
<10 cfu/g
<10 cfu/g
<10 cfu/g
<10 cfu/g
<10 cfu/g
<10 cfu/g
Negative per 10g

RESIDUAL SOLVENT SCREEN ✔ Pass

08/21/2020

Method: USP OVI<467>

Instrument: Gas Chromatography Mass Spectrometry (GC/MS)

Analyte	LOD / LOQ (µg/g)	Finding (µg/g)	Limit (µg/g)	Status
1,2-Dichloroethane	0.10/1.00	ND	1.0	Pass
Acetone	11/150	ND	5000	Pass
Acetonitrile	1/12	ND	410	Pass
Benzene	0.10/1.00	ND	1.0	Pass
n-Butane	130/400	ND	5000	Pass
Chloroform	0.10/1.00	ND	1.0	Pass
Ethanol	13/200	ND	5000	Pass
Ethyl Acetate	5/80	ND	5000	Pass
Ethyl Ether	17/50	ND	5000	Pass
Ethylene Oxide	0.50/1.00	ND	1.0	Pass
n-Heptane	15/100	ND	5000	Pass
n-Hexane	2/10	ND	290	Pass
Isopropyl Alcohol	5/100	<LOQ	5000	Pass
Methanol	3/50	ND	3000	Pass
Methylene Chloride	0.50/1.00	ND	1.0	Pass
n-Pentane	26/150	ND	5000	Pass
Propane	170/510	ND	5000	Pass
Toluene	2/30	ND	890	Pass
Total Xylenes	5/90	ND	2170	Pass
Trichloroethylene	0.10/1.00	ND	1.0	Pass

HEAVY METAL SCREEN ✔ Pass

08/21/2020

Method: MF 24E020

Instrument: ICP-MS

Analyte	LOD / LOQ (µg/g)	Finding (µg/g)	Limit (µg/g)	Status
Arsenic	0.02 / 0.05	0.06	1.5	Pass
Cadmium	0.02 / 0.05	ND	0.5	Pass
Mercury	0.02 / 0.05	ND	3	Pass
Lead	0.02 / 0.05	<LOQ	0.5	Pass

(-) = Not Tested, ND = None Detected, <LOQ = Below Limit of Quantitation, LOD = Limit of Detection

Reported by


Vu Lam
Lab Co Director



Scan to verify