

4100 Fairway Drive, Ste 600 Carrollton, TX 75010 www.realtimelab.com

# **MYCOTOXIN PANEL REPORT FORM** 05/12/2023

PATIENT INFORMATION

Patient Date of Birth: 01/01/2001

Patient Sex: NA MRN/Patient ID: NA Patient Email: NA

Patient: Patient Doe

ORDER INFORMATION

Accession No: 050123A Reported On: 05/12/2023 Physician: Doctor Doe

Practice: Real Time Laboratories Address: 4100 Fairway Court, Suite 600,

Carrollton, TX 75010

SAMPLE INFORMATION

Date of Receipt: 05/12/2023 Time of Receipt: 15:12 CDT Date of Collection: 05/1/2023 Time of Collection: 00:00 CDT

Specimen Type: Urine

LAB INFORMATION

Phone: 1-972-492-0419 Fax: 1-972-243-7759 Email: info@realtimelab.com CLIA #: 45D1051736 CAP #: 7210193

Tax ID #: 0669342

Procedure Type: Semi-quantitative procedure by ELISA

## List of Mycotoxins tested in the Panel

Ochratoxin A - Procedure by ELISA

Aflatoxin Group: (B1, B2, G1, G2) - Procedure by ELISA

Trichothecene Group (Macrocyclic): Roridin A, Roridin E, Roridin H, Roridin L-2, Verrucarin A, Verrucarin J, Satratoxin G, Satratoxin H, Isosatratoxin F - Procedure by ELISA

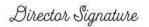
Gliotoxin Derivative - Procedure by ELISA

Zearalenone - Procedure by ELISA

#### Results:

Code	Test	Specimen	Value	Result	Not Present if less than	Equivocal if between	Present if greater or equal
E8501	Ochratoxin A	Urine	1.03300 ppb	Not Present	1.8 ppb	1.8-2 ppb	2 ppb
E8502	Aflatoxin Group: (B1, B2, G1, G2)	Urine	0.59300 ppb	Not Present	0.8 ppb	0.8-1 ppb	1 ppb
E8503	Trichothecene Group (Macrocyclic): Roridin A, Roridin E, Roridin H, Roridin L-2, Verrucarin A, Verrucarin J, Satratoxin G, Satratoxin H, Isosatratoxin F	Urine	0.11000 ppb	Present	0.07 ppb	0.07-0.09 ppb	0.09 ppb
E8510	Gliotoxin Derivative	Urine	0.55800 ppb	Equivocal	0.5 ppb	0.5-1.0 ppb	1 ppb
E8512	Zearalenone	Urine	0.32600 ppb	Not Present	0.5 ppb	0.5-0.7 ppb	0.7 ppb

Comment: RealTime Lab has validated a new Trichothecene testing procedure. Effective 5/18/2022, all results are reported using the new procedure. Please note the new values for cutoff levels. If you have further questions, please contact our sales team at kits@realtimelab.com.

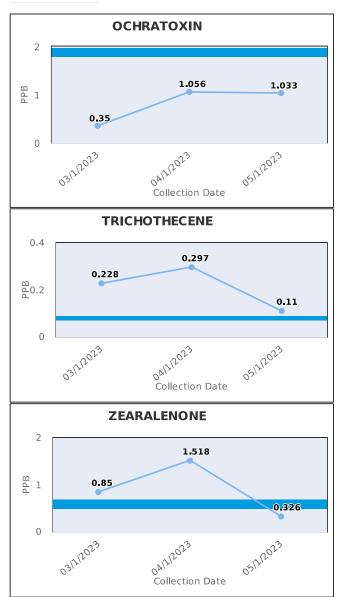


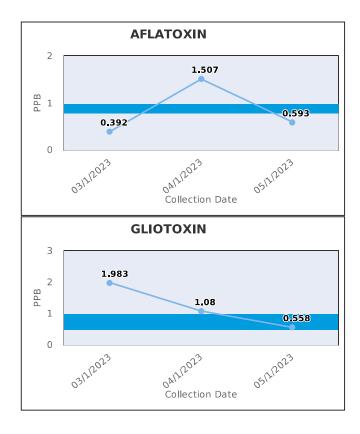
Director or Designee Signature

Tests such as this should be used only in conjunction with other medically established diagnostic elements (e.g., symptoms, history, clinical impressions, results from other tests, etc). Physicians should use all the information available to them to diagnose and determine appropriate treatment for their patients.

Disclaimer: This test was developed and its performance characteristics determined by RealTime Lab. It has not been cleared or approved by the U.S. Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary. This laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA-88) as qualified to perform high complexity clinical laboratory testing.

### **Historical Results:**





## Results Summary:

Accession No	Collection Date	Ochra Result	Afla Result	Tricho Result	Gliotoxin Result	Zearalenone Result
050123A	05/1/2023	1.03300 - Not Present	0.59300 - Not Present	0.11000 - Present	0.55800 - Equivocal	0.32600 - Not Present
040123A	04/1/2023	1.05600 - Not Present	1.50700 - Present	0.29700 - Present	1.08000 - Present	1.51800 - Present
030123A	03/1/2023	0.35000 - Not Present	0.39200 - Not Present	0.22800 - Present	1.98300 - Present	0.85000 - Present

	Mycotoxin	Cellular Activity of Mycotoxin	Symptoms/Other	Association with a "Disease State"				
	A FLATOXIN FA MILY							
Organisms: Aspergillus flavus, Aspergillus oryzae, Aspergillus fumigatus, Aspergillus parasiticus								
A flatoxins have been associated with liver cancer [2,3], cirrhosis [4,5], and other health issues								
1	Aflatoxin B1	Binds DNA and proteins [6,7]	Shortness of breath [8], weight loss [10], most potent and highly carcinogenic.	Primarily attacks the liver, other organs include kidneys and lungs [11]				
2	Aflatoxin B2	Inhibits DNA and RNA replication [12]	Impaired fetal growth [13,14]	Affects the liver and kidneys [11]				
3	Aflatoxin G1	Cytotoxic, induces apoptosis in cells, DNA damage [1]	A flavus is a leading cause of invasive aspergillus in immunocompromised patients [15]	Cancer, neonatal jaundice [2,3,16]				
4	Aflatoxin G2	Cancer, neonatal jaundice [2,3,16]	Aflatoxicosis in humans and animals [15]	Malnutrition, lung cancer [2,3,16]				
	OCHRATOXIN A							
	Organisms: Aspergillus ochraceus, Aspergillus niger, Penicillium species							
5	Ochratoxin A	Inhibits mitochondrial ATP, potent teratogen, and immune suppressor [17-19]	Fatigue, dermatitis, irritated bowel [20-22]	Kidney disease and cancer [23,24]				
MA CROCYCLIC TRICHOTHECENES (Group D)								
Organism: Stachybotrys chartarum								
6	Satratoxin G	DNA, RNA, and protein synthesis inhibition [25]	Fatigue [26]	Bleeding disorders, nervous system disorders [27,28]				
7	Satratoxin H	Inhibits protein synthesis [25]	Fatigue [26]	Breathing issues [29]				
8	Isosatratoxin F	Immunosuppression [30]	Weakened immune system [30]					
9	Roridin A	Immunosuppression [30]	Weakened immune system [30]					
10	Roridin E	DNA, RNA, and protein synthesis disruption [25,32]	Weakened immune system [30]	Lung and nasal olfactory problems [31]				
11	Roridin H	Inhibits protein synthesis [25]	Weakened immune system [30]					
12	Roridin L-2	Immunosuppression [30]	Weakened immune system [30]					
13	Verrucarin A	Immunosuppression [30]						
14	Verrucarin J	Immunosuppression [30]						
GLIOTOXIN DERIVATIVE								
Organisms: Aspergillus fumigatus, Aspergillus terreus, Aspergillus niger, Aspergillus flavus								
15	Gliotoxin	Attacks intracellular function in immune system [34]	Memory and breathing issues [35,36]	Immune dysfunction disorders [34]				
ZEARALENONE								
Organisms: Fusarium species								
16	Zearalenone	Estrogen mimic [37,38]	Early puberty, low sperm counts, cancer [39-42]	Cancer [39,40]				

#### REFERENCES:

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