

The gold standard of accuracy in the lab industry

The Toxin Genetics test uses **real-time PCR (RT-PCR) technology** to detect genetic variants (SNPs) impacting detoxification of toxicants—including xenobiotics, environmental toxins, heavy metals, mycotoxins, and PFAS—with unparalleled sensitivity and specificity.

Toxin Genetics Markers					
SNP ID	Gene	Risk Association	SNP ID	Gene	Risk Association
Environmental Toxins			Mycotoxins		
rs2234922	EPHX1	Benzene	rs2056131	ITGB3	Increased Mold sensitivity
rs1051741	EPHX1	Benzene	rs28383151	XRCC4	Aflatoxin
rs751141	EPHX2	Benzene	rs3734091	XRCC4	Aflatoxin
rs1902023	UGT2B15	Bisphenol A, Parabens (MeT, EtP)	rs25487	XRCC1	Aflatoxin
rs1048943	CYP1A1	Organochlorine, Organophosphate	rs861539	XRCC3	Aflatoxin
rs1056836	CYP1B1	Pesticides (Diazinon, Malathion)	rs7003908	XRCC7	Aflatoxin
rs1695	GSTP1	Benzidine, styrene, pesticides	rs13181	XPD	Aflatoxin
rs1138272	GSTP1	Tobacco smoke, alcohol	rs2228001	XPC	Aflatoxin
Heavy Metals			Xenobiotics		
rs11076161	MT1A	Cadmium	rs1042157	SULT1A1	Poor xenobiotic detoxification
rs1695	GSTP1	Arsenic, cadmium, mercury	rs762551	CYP1A2	Poor xenobiotic detoxification
rs1138272	GSTP1	Mercury	rs1871042	GSTP1	Poor xenobiotic detoxification
rs713041	GPx4	Mercury	rs713041	GPx4	Poor xenobiotic detoxification
rs1050450	GPx1	Methylmercury, lead, tobacco	rs4680	COMT	Poor xenobiotic detoxification
			PFAS		
	rs1048943	CYP1A1		PFOS, PFOA	
	rs1056836	CYP1B1		PFAS	

Revised 11/14/2024