Isotopic abundances

Common organic elements can be divided into 3 groups: M+2 elements (bromine, chlorine, sulfur, silicon and oxygen), M+1 elements (carbon and nitrogen) and M elements (fluorine, iodine, phosphorus and hydrogen) according to the presence of their naturally occurring isotopes M+2 and M+1 (see Table). The natural relative abundance of deuterium (^{2}H) is negligible (0.015%), hence hydrogen is included in the group of monoisotopic (M) elements.

Table: Natural abundances of common organic elements

Element	"M" isotope		"M+1" isotope		"M+2" isotope		Type of element
	m/z	%	m/z	%	m/z	%	
H	1	100	2	0.015	-	-	"M"
C	12	100	13	1.1	-	-	"M+1"
N	14	100	15	0.37	-	-	"M+1"
O	16	100	17	0.04	18	0.2	"M+2"
F	19	100	-	-	-	-	"M"
Si	28	100	29	5.1	30	3.3	"M+2"
P	31	100	-	-	-	-	"M"
S	32	100	33	0.79	34	4.3	"M+2"
Cl	35	100	-	-	37	32	"M+2"
Br	79	100	-	-	81	97.3	"M+2"
I	127	100	-	-	-	-	"M"