

Adducts & Clusters formed in LC/MS

Adduct Ion Formed	Cause	Adduct*/ Ionic	APCI	ESI	+/-	m/z of Ion
Lithium [M+Li] ⁺	Lithium Salts	Ionic	☐	☐	+	[M + H + 6] ⁺
Ammonia [M + NH ₄] ⁺	Ammonia/ NH ₄ OH	Adduct	☐	☐	+	[M + H + 17] ⁺
Water [M + H ₃ O] ⁺	Water/ Acids	Adduct	☐	☐	+	[M + H + 18] ⁺
Sodium [M + Na] ⁺	Sodium salts	Ionic	☐	☐	+	[M + H + 22] ⁺
Methanol [M + H + CH ₃ OH] ⁺	Methanol in Solvent	Adduct	☐	☐	+/-	[M + H + 32] ⁺ [M - H + 32] ⁻
Chloride [M + Cl] ⁻	Chlorinated solvent	Ionic	☐	⌚	-	[M + 35 (& 37)] ⁻
Potassium [M + K] ⁺	Potassium salts	Ionic	☐	☐	+	[M + H + 38] ⁺
Acetonitrile [M + H + CH ₃ CN] ⁺	Acetonitrile in solvent	Adduct	☐	☐	+/-	[M + H + 41] ⁺ [M - H + 41] ⁻
Formic Acid [M - H + HCO ₂ H] ⁻	Formic Acid	Adduct	☐	☐	-	[M - H + 46] ⁻
Acetic Acid [M - H + CH ₃ CO ₂ H] ⁻	Acetic Acid	Adduct	☐	☐	-	[M - H + 60] ⁻
TFA [M - H + CF ₃ CO ₂ H] ⁻	TFA	Adduct	☐	☐	-	[M - H + 114] ⁻

* Adducts can often be broken up by using a higher DP voltage.