

Inductive and Resonance effects

Function Group or Radical	Inductive Effect	Resonance Effect
Alkyl radicals	+I	–
–NH ₂	–I	+R
–OR	–I	+R
Hal–	–I	+R
–OH	–I	+R
–NO ₂	–I	–R
>C=O	–I	–R
$ \begin{array}{c} \text{O} \\ \parallel \\ -\text{C} \\ \backslash \\ \text{H} \end{array} $	–I	–R
–COOH	–I	–R
–SO ₃ H	–I	–R