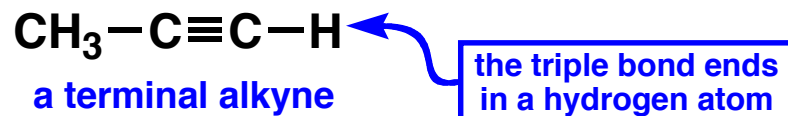
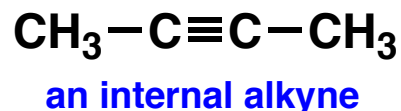


# The Alkyne's Terminal Hydrogen Is Acidic



Compared to other C-H bonds, the terminal hydrogen of a terminal alkyne is acidic. Yes, it is a weak acid, but comparatively speaking, it is acidic. Deprotonation results in a carbon-centered anion that is sp hybridized. This anion is called an **acetylide anion**. As stated earlier, sp hybrid orbitals are more effective at stabilizing negative charge than sp<sup>2</sup> or sp<sup>3</sup> orbitals. It is the stability of the anion that makes the C-H of a terminal alkyne more acidic than other C-H bonds.

