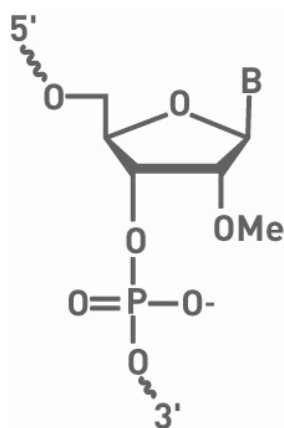


2'-O-Methyl bases

Structure



Key data

mA Mw: 343.2
mC Mw: 319.2

mG Mw: 359.2
mU Mw: 320.2

Properties

2'-O-Methyl RNA is a naturally occurring modification of RNA found in tRNA and other small RNAs that arises as a post-transcriptional modification. Oligonucleotides can be directly synthesized that contain 2'-O-Methyl RNA. This modification increases T_m of RNA:RNA duplexes but results in only small changes in RNA:DNA stability. It is stable with respect to attack by single-stranded ribonucleases and is typically 5 to 10-fold less susceptible to DNases than DNA. It is commonly used in antisense oligos as a means to increase stability and binding affinity to the target message.