

HIV 101

The Anatomy of an Antiretroviral Resistance Mutation

M 184 V

First letter denotes the amino acid that should be at this codon position of the HIV genome. In this case the 'M' stands for methionine.

The letter at the end indicates what amino acid replaced the one that should have been located at this codon. Here a valine was substituted for the methionine, leading to a structural change in the enzyme that renders the virus resistant to 3TC and FTC.

The number designates the position in the HIV genome where the switch in amino acids is taking place. Here it is at the 184 position, which is located in the region where the virus's genes for the reverse transcriptase enzyme are located.

Resistance to a reverse transcriptase inhibitor would be expected to be located in this region.