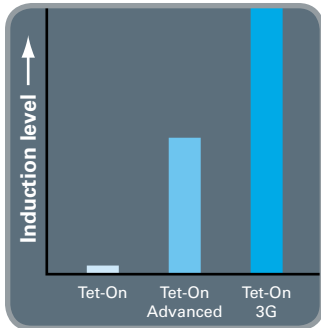
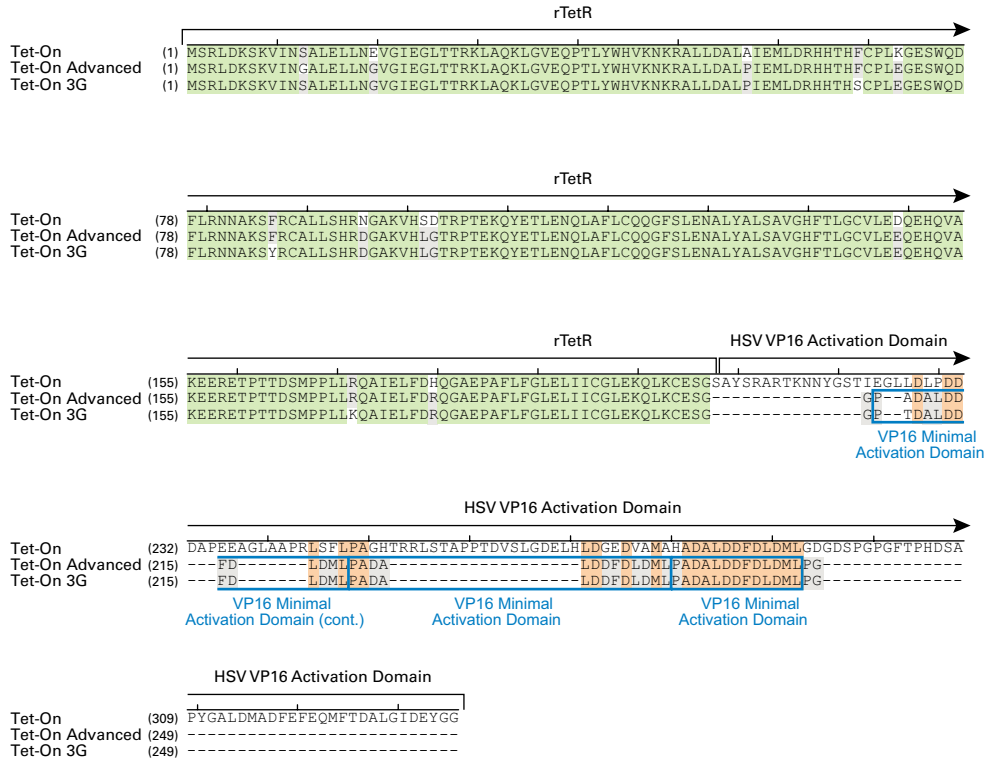


Tet-On® Transactivators

Sequence comparison



Visit our website



Sequence comparison of the three generations of Tet-On transactivators sold by Clontech®. Each Tet-On transactivator consists of a mutant form of bacterial tet repressor (rTetR) fused to a transcriptional activation domain. The rTetR portion is the DNA binding domain that recognizes and binds the 7 identical repeats of the tet operator sequence found in tetracycline inducible promoters (TRE promoters), but only in the presence of doxycycline. The VP16 activation domains are located at the C-terminus of the rTetR protein and function to activate transcription. Both Tet-On Advanced and Tet-On 3G contain 3 repeats of a minimal activation domain (blue boxes) that serve to minimize off-target effects and reduce cytotoxicity. Five additional mutations in the Tet-On 3G transactivator compared to the Tet-On Advanced transactivator result in significantly enhanced sensitivity to Dox.