

TechTIP: For LTQ XL™ Operations

Improving ETD Activation Times

For increased coverage of complex sample mixtures, the activation time used for ETD fragmentation of higher charge state peptides should be around 50ms. However, upon tuning the ETD activation time for +3 and higher charge states, you may find that the optimized activation time is significantly greater than this recommended value.

An easy way to reduce the activation time is to increase the reagent ion AGC target setting from its default value of $1.00e+05$. Here's how:

1. Open the **LTQ Tune** window
2. Next, open the **Injection Control** window by clicking on the linear trap icon in the LTQ Tune window, or by selecting *Injection Control* in the Setup menu.
3. After the Injection Control window opens, select the **Reagent** tab
4. Now adjust the **AGC Target** value for the reagent ion in **$1.00e+05$** steps
5. Finally, click the **Apply** button, and then retune the ETD activation time until the optimized time is near the recommended value.