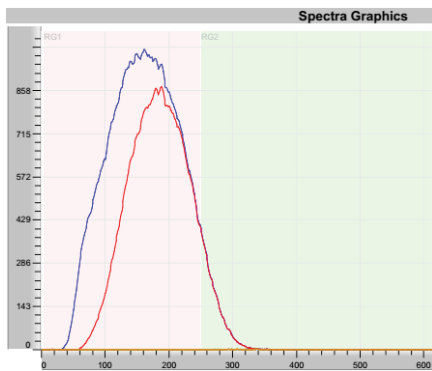


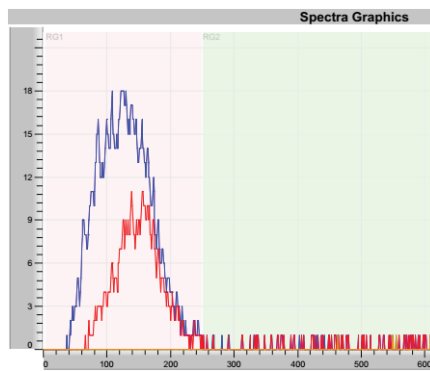
True background with minimal random counts spread across MCA

The 300SL/600SL's unique triple PMT detector system can help assess a false-positive from true radioactivity.

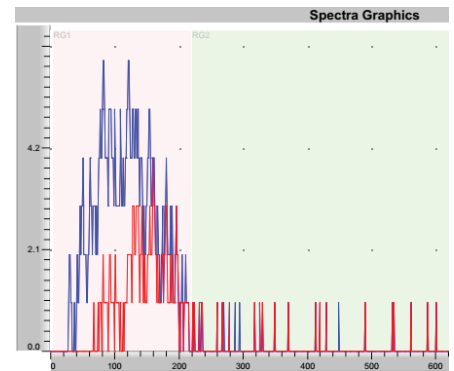
The TDCR (triple-double-coincidence-ratio) generates two sets of data: a blue spectrum based on two PMTs in coincidence (like a traditional LSC), and a red spectrum based on three PMTs in coincidence. True radioactivity will have a mirroring blue and red spectrum. The shape of the spectra will vary based on isotope. The width of the spectra will vary based on quench and the height of the spectra will vary based on activity. Luminescence (false-positive) cannot be detected on three PMTs in coincidence, but can be detected on two PMTs (like a traditional LSC). The 300SL/600SL's unique TDCR capability can assess if your wipe samples have true radioactivity or a false-positive (high counts but no mirroring spectra).



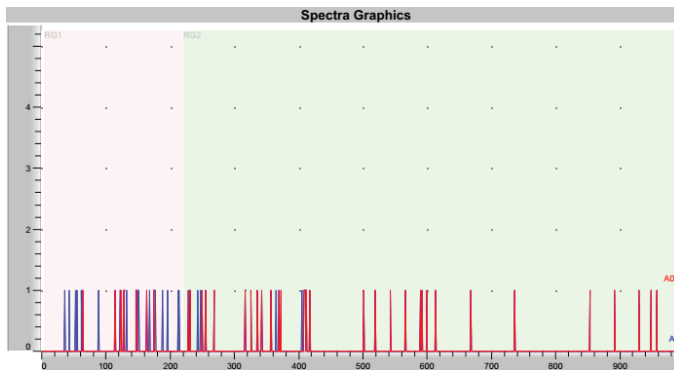
Unquenched ^3H standard with mirroring blue double coincidence and red triple coincidence spectra.



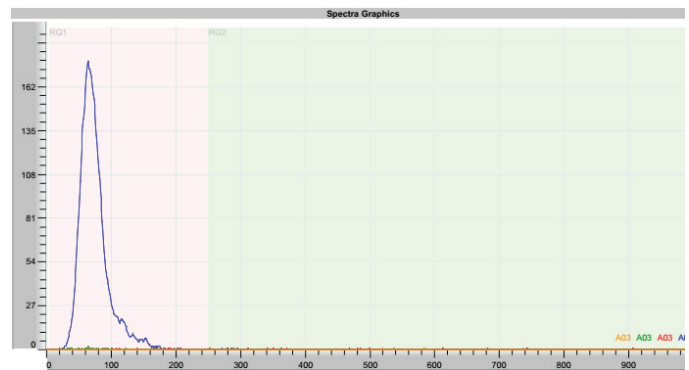
Common activity ^3H sample with mirroring blue double coincidence and red triple coincidence spectra.



Low activity ^3H sample with choppy spectra. Increasing count time will allow for more accumulation of spectral data and smooth out spectra.



True background with minimal random counts spread across MCA.



Luminescence spike with blue double coincidence spectrum and no mirroring red triple coincidence spectrum. Common indicator of a false-positive.