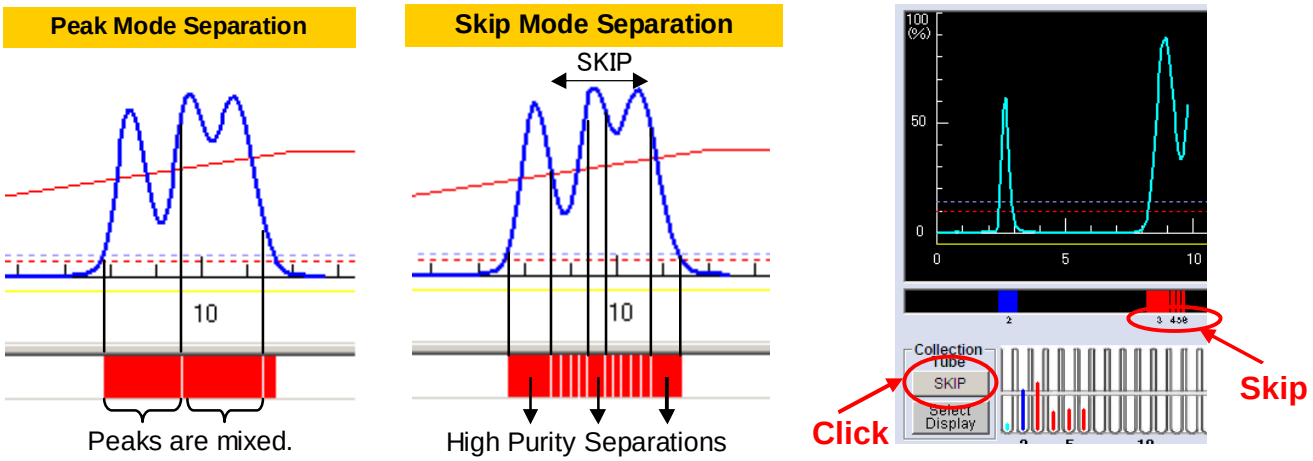
Technique for Collecting Fractions; SKIP, Waste Diversion, and Manual Collection

【Method 1】 SKIP Function

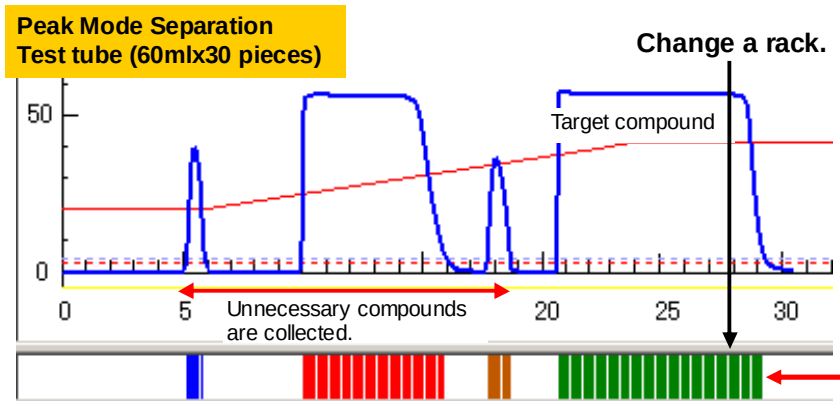
The fraction nozzle will move to the next test tube at any time during collecting a fraction upon clicking on the [SKIP] button. This function enables whatever volume of a fraction the chemist would like to collect.



The portions of the chromatogram where peaks are overlapped and mixed can be separated in many small fractions by SKIP function, while monitoring the chromatogram. Thus, high purity compounds can be collected.

【Method 2】 Waste Diversion reduces the use of extra test tubes.

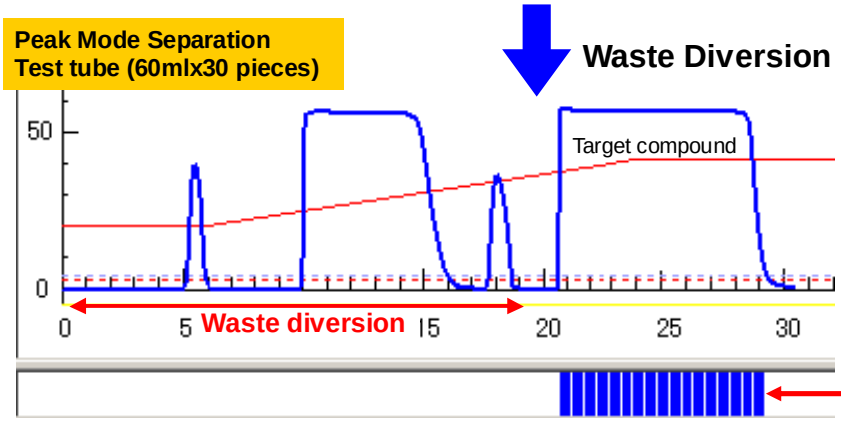
Waste Diversion is set (Input start time and end time) to divert unnecessary fractions to the waste reservoir. When the eluting position of the target compound is already known, only the target will be collected while diverting the rest to the waste reservoir.



Collecting unnecessary fractions leads to waste of many test tubes. This data will show that the rack change would be required while collecting the target compound.

33 test tubes are used.

Waste Diversion is set.



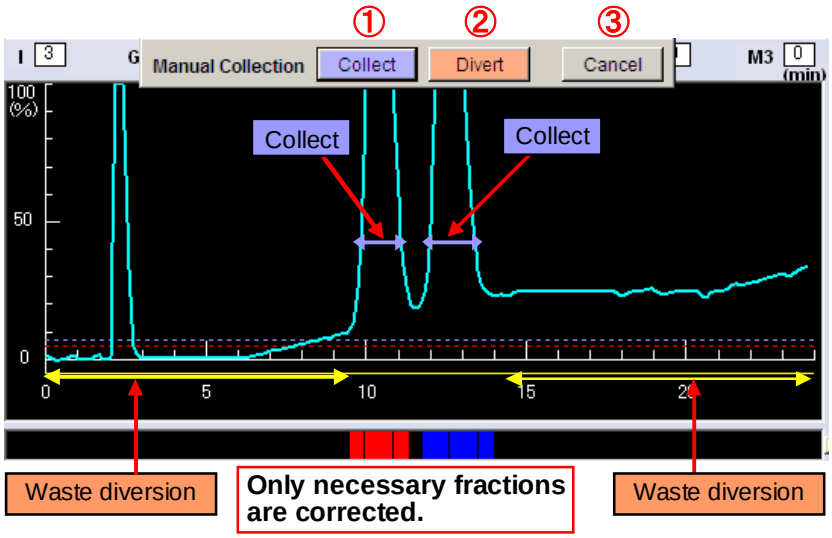
When the waste Diversion is set, all the unnecessary fractions before the target compound will be diverted to the waste reservoir.

17 test tubes are used.

Yamazen's Auto Method Set-up will elute the target compound at around 4-column volume. Therefore, setting the Waste Diversion close to the target peak will minimize the use of the test tubes.

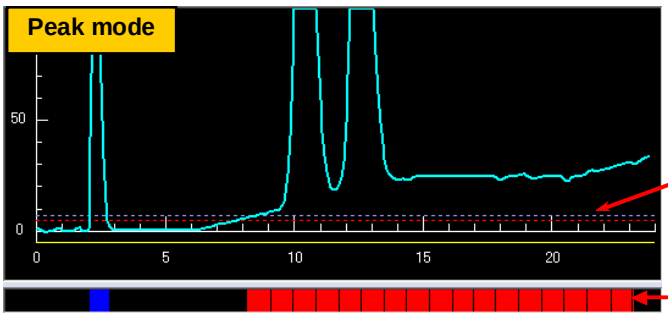
【Method 3】Manual Collection - 1 of 2

Manual collection mode allows for either collect fractions or divert them to the waste by clicking on [Collect] button① or [Divert] button②. Base line could drift if eluting solvents absorb the UV. By using the manual collection mode, unnecessary fractions including the base line drift will be diverted to the waste and only the target compound(s) can be collected, which reduces the test tubes use.



Manual Collection mode will turn off, when the [Cancel]③ button is clicked. The fractions will be collected with the original collection mode (Time mode or Peak mode or Peak & Slope mode) that was set up prior to the run.

Use Manual Collection mode.

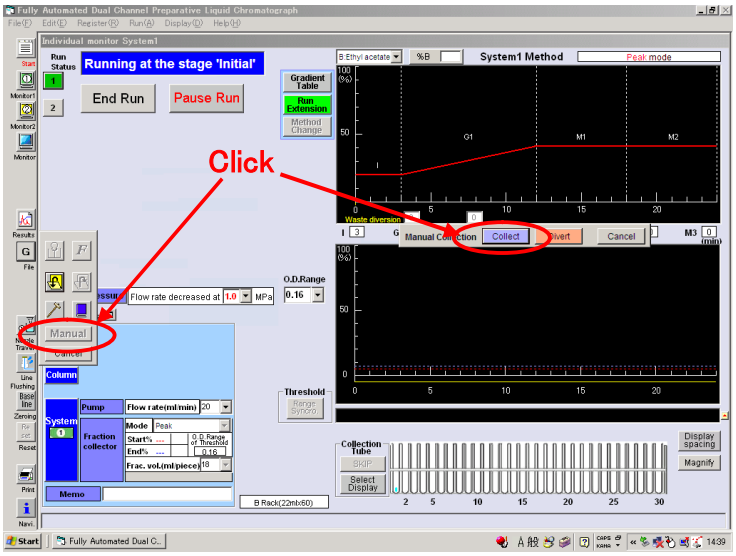


Threshold for Peak mode separation

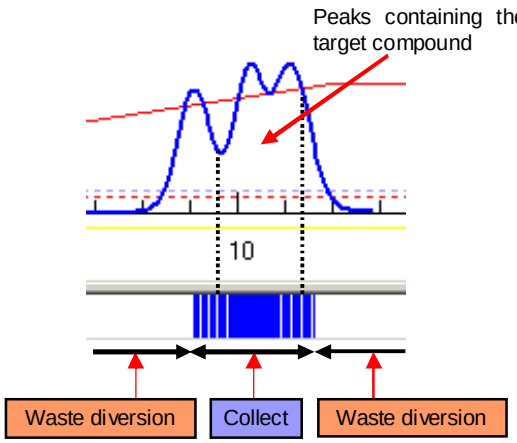
Peak mode would collect unnecessary fractions as well as the target compounds.

【Method 4】Manual Collection - 2 of 2

By using Manual Collection mode and SKIP function together, any fractions in any volume can be collected.



Using Manual Collection mode and SKIP function



Only the necessary fractions will be collected with Manual Collection mode. Peaks containing the target compound can be collected in many small fractions with SKIP function to increase the purity of the target compound.

YAMAZEN CORPORATION

HEAD OFFICE : RECRUIT SHINOSAKA BLDG. 3F, 5-14-22 NISHINAKAJIMA, YODOGAWA-KU, OSAKA 532-0011, JAPAN
TEL: +81-6-6304-5839 FAX: +81-6-6304-3681
R & D : SANWA BLDG. 101, 4-6-10 NISHINAKAJIMA, YODOGAWA-KU, OSAKA 532-0011, JAPAN
TEL: +81-6-6304-7284 FAX: +81-6-6304-7283
E-MAIL : info@yamazenc.co.jp WEB SITE : http://www.yamazenc.co.jp