



**Figure 4-4. Reverse phase HPLC purification of [<sup>3</sup>H]progesterin aryl azide labeled fragments from trypsin digest of  $\alpha$ V8-10**

A,  $\alpha$ V8-10 isolated from nAChR photolabeled with [<sup>3</sup>H]progesterin aryl azide was digested with trypsin. The digest was applied to a Brownlee Aquapore C4 column and fractionated by reverse-phase HPLC. <sup>3</sup>H elution profiles (●) are from scintillation counting of 10% of each fraction. Fluorescence (·····) and absorbance profiles (—) were measured as described in methods.

B, <sup>3</sup>H (●,○) and mass released (■, ▼, □, ▽) on N-terminal sequencing of material in HPLC fractions 34-36 from two separate preparative labeling experiments. In one experiment (●), two sequences containing  $\alpha$ M4 were present, one beginning at  $\alpha$ Tyr-401 (■, I<sub>0</sub>=27 pmol, R=83%), and one beginning at  $\alpha$ Ser-388 (▼, I<sub>0</sub>=25 pmol, R=83%), as well as a sequence beginning at  $\alpha$ Met-243 (I<sub>0</sub>=10 pmol, R=86%), containing the  $\alpha$ M2 and  $\alpha$ M3 segments. Total <sup>3</sup>H in the HPLC fractions was 6000 cpm, with 1300 cpm released during pre-wash, and 1300 cpm remaining on the filter. In the other experiment (○), only the sequences containing  $\alpha$ M4 were present ( $\alpha$ Tyr-401 (□): I<sub>0</sub>=15 pmol, R=80%;  $\alpha$ Ser-388 (▽): I<sub>0</sub>=20 pmol, R=82%). Total <sup>3</sup>H in the HPLC fractions was 3500 cpm, with 1100 cpm released during pre-wash, and 310 cpm remaining on the filter.