

TECHNETIUM Tc-99m SODIUM PERTECHNETATE

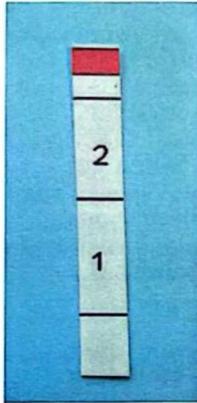
(Sodium pertechnetate, Tc-99m pertechnetate, TcO₄⁻)

RADIOCHEMICAL IMPURITIES:

Reduced Technetium-99m, including hydrolyzed reduced Tc-99m.

QUALITY CONTROL METHOD:

CHROMATOGRAPHY SYSTEM:



Whatman 31ET (0.7 x 6 cm) with Acetone. Red color-coded chromatography strip. Technetium-99m pertechnetate migrates with the solvent front ($R_f=1.0$), other reduced Tc-99m radiochemical impurities remain at the origin ($R_f=0.0$). The cut line is located at $R_f=0.6$.

CHROMATOGRAPHY PROCEDURE:

Use Single-Strip Procedure (PROCEDURE 1A). Add acetone (0.8 to 1.5 ml) to serum or scintillation vial. Following radiopharmaceutical spotting, immediately place the red strip in acetone and allow solvent to migrate to solvent front line. Remove strip, cut at cut line into sections 1 and 2 and count for activity. Calculations are performed as outlined in SINGLE STRIP PROCEDURE 1A which is attached.