Supplementary Information for

Technetium-99m complexes of L-arginine derivatives for targeting amino acid transporters

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RP-HPLC CHROMATOGRAMS



Figure S1. RP-HPLC chromatograms of L^1 and L^2 . Macherey-Nagel C18 reversed-phase column (Nucleosil 100-5, 250 x 3 mm) with a flow rate of 0.5 mL/min. Eluents: aqueous 0.1 % CF₃CO₂H/MeOH. Gradient: t = 0-5 min: 10 % MeOH; 5-30 min: 10 \rightarrow 100 % MeOH; 30-34 min: 100 % MeOH; 34-35 min: 100 \rightarrow 10 % MeOH; 35-40 min: 10 % MeOH. Detection: λ = 220 nm.

NMR SPECTRA

¹H-NMR spectrum



Figure S2. Assigned ¹H and ¹³C-NMR spectra of L¹.









Figure S3. Assigned ¹H and ¹³C-NMR spectra of L².



Figure S4. RP-HPLC chromatograms of Tc1 and Tc2. Macherey-Nagel C18 reversed-phase column (Nucleosil 100-5, 250 x 3 mm) with a flow rate of 0.5 mL/min. Eluents: aqueous 0.1 % $CF_3CO_2H/MeOH$. Gradient: t = 0-5 min: 10 % MeOH; 5-30 min: 10 \rightarrow 100 % MeOH; 30-34 min: 100 % MeOH; 34-35 min: 100 \rightarrow 10 % MeOH; 35-40 min: 10 % MeOH. γ detection.



Figure S5. Stability of **Tc1** and **Tc2**. RP-HPLC chromatograms of **Tc1** and **Tc2** in phosphate buffered saline (PBS) pH 7.4 (**A**) and in PBS pH 7.4 with a 100 fold excess histidine (**B**) after 24 h at 37°C. Macherey-Nagel C18 reversed-phase column (Nucleosil 100-5, 250 x 3 mm) with a flow rate of 0.5 mL/min. Eluents: aqueous 0.1 % $CF_3CO_2H/MeOH$. Gradient: t = 0-5 min: 10 % MeOH; 5-30 min: 10 \rightarrow 100 % MeOH; 30-34 min: 100 % MeOH; 34-35 min: 100 \rightarrow 10 % MeOH; 35-40 min: 10 % MeOH. γ detection.



Figure S6. RP-HPLC analytical chromatograms of Re1 (UV detection, 220 nm) and Tc1 (γ-detection).