Radiosynthesis and biodistribution of an $^{125}$I-labeled resveratrol derivative: A potential radiolabeled imaging agent

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An $^{125}$I-labeled resveratrol derivative was synthesized. It was purified by reverse phase HPLC. Radiochemical purity of the product was >98% with decay-corrected yield of 35%. Its biodistribution profile was examined in tumor-bearing mice. The highest uptakes were found in intestine and stomach. But the uptakes were low in blood, liver, spleen, kidney, lung, muscle, bone, brain, and tumor tissues. Because of low tumor uptake of radioactivity, compound 1 cannot be used for tumor imaging. The high intestinal and gastric uptakes of the new radiolabeled resveratrol derivative 1 suggest that it can be developed as an imaging agent for intestine and stomach.

Biography

Mohammed I. El-Gamal got his Ph.D. degree in medicinal chemistry in August 2012 at the University of Science and Technology (UST, Republic of Korea). Then he has held “Star Postdoctoral Fellow” position at Korea Institute of Science and Technology (KIST, Seoul, Republic of Korea) since September 2012 till now. During his Ph.D. course, he was awarded 4 scientific awards in Korea. He has published more than 30 papers in reputed journals. And he has been serving as editorial board member of 8 international journals.