

BROAD SPECTRUM CHEMOKINE RECEPTOR IMAGING AGENT

[Liu, Yongjian](#)

[Richards, Jennifer](#)

T-019607

⁶⁴Cu-DOTA-vMIP-II is a broad spectrum PET imaging agent that provides a non-invasive measurement of up to 10 chemokine receptors involved in the inflammatory processes of various diseases. This agent is based on the peptide vMIP-II (viral macrophage inflammatory protein-II), a viral CC chemokine encoded by HHV8, known as the Kaposi's sarcoma-associated herpesvirus (KSHV). The receptors targeted by vMIP-II include CCR1, CCR2, CCR3, CCR4, CCR5, CCR8, CXCR4, CX3CR1, XCR1 and CXCR3. ⁶⁴Cu-DOTA-vMIP-II has been used in a variety of animal models to study atherosclerotic lesions, pulmonary inflammation, and head and neck cancer.

Publication: Liu, Y., Pierce, R., Luehmann, H. P., Sharp, T. L., & Welch, M. J. (2013). [PET Imaging of chemokine receptors in vascular injury-accelerated atherosclerosis](#). *Journal of Nuclear Medicine*, 54(7), 1135-1141.