

BROAD SPECTRUM CHEMOKINE RECEPTOR IMAGING AGENT

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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.

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