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[54] PURIFICATION AND MOLECULAR CLONING OF NITRIC OXIDE SYNTHASE

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[58] Field of Search 536/27; 435/69.1

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[57] ABSTRACT

A method of purifying calmodulin-dependent nitric oxide synthase provides a homogeneous preparation of the enzyme. The enzyme is used to raise antibodies which are a useful immunohistochemical reagent. The antibodies localize calmodulin-dependent nitric oxide synthase to a number of anatomical sites, including retina, intestine, adrenal gland, and vasculature. However, activated macrophages, which are known to possess a nitric oxide producing activity, do not display an immunoreactive protein of appropriate size on Western blots using the antibodies. Nucleotide sequences encoding calmodulin-dependent nitric oxide synthase indicate a novel sequence with a flavin binding site consensus sequence.

11 Claims, 3 Drawing Sheets