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(54) Title: NITRIC OXIDE-BLOCKED CROSS-LINKED TETRAMERIC HEMOGLOBIN

(57) Abstract: The present invention includes compositions containing carboxamidomethylated cross-linked hemoglobin where the cysteine moiety of the hemoglobin includes a thiol protecting group and where the hemoglobin has a reduced ability to bind with nitric oxide. Preferably, the hemoglobin is deoxygenated, endotoxin free, and stroma free. The present invention also includes method of preparation, process of preparation and the method of use including supplementing blood volume in mammals and treating disorders in mammals where oxygen delivery agents are of benefit.



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