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Title: Sialic acid-specific affinity chromatography for the separation of erythropoietin glycoforms using serotonin as a ligand

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### ACCEPTED MANUSCRIPT

# Sialic Acid-Specific Affinity Chromatography for the Separation of Erythropoietin Glycoforms Using Serotonin as a Ligand

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#### Highlights

- Serotonin-coupled matrices specifically bind erythropoietin only in its sialylated form
- Binding of erythropoietin to serotonin is pH independent between pH 3.5 to 8
- Erythropoietin glycoforms were separated into fractions of different degrees of sialylation
- Fractions with sialylation degrees similar or even higher compared to the commercial end product were achieved

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