

EXHIBIT 13

**Pre-Clinical Studies on
Mode of Action:
Current Status**

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Preclinical Team Leader

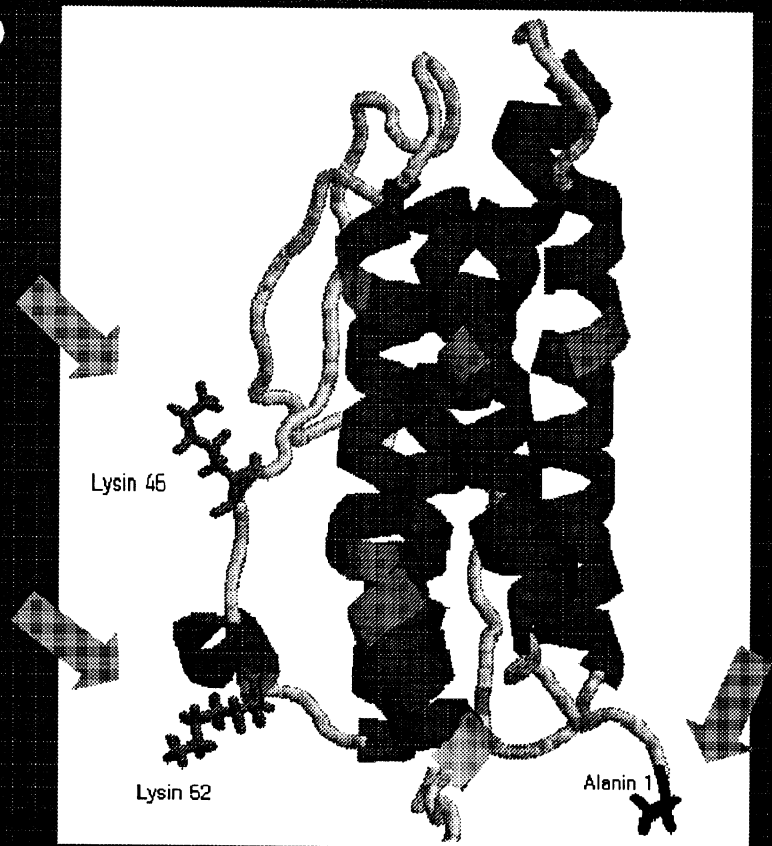
F. Hoffmann-La Roche Ltd, Penzberg

Topics

- **Molecular Properties of CERA**
 - Structure and physicochemical properties
 - Reduced *in vitro* activity (UT-7 assay)
- **Consumption studies in cellular models**
- **Receptor binding studies**
 - Displacement of ¹²⁵I-EPO by EPO and CERA
 - FACS studies for binding and uptake of fluorescent labelled compounds
 - Confocal laser microscopy and overexpression of EpoR
 - Biacore analysis of receptor interaction

Epoetin Molecular Structure

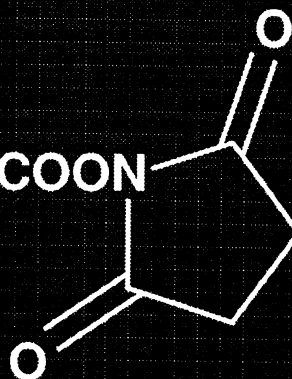
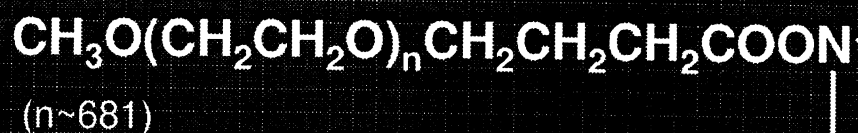
- Tertiary structure of rhuEPO amino acid backbone with main pegylation sites



Molecular Structure

chemical structure

PEG reagent



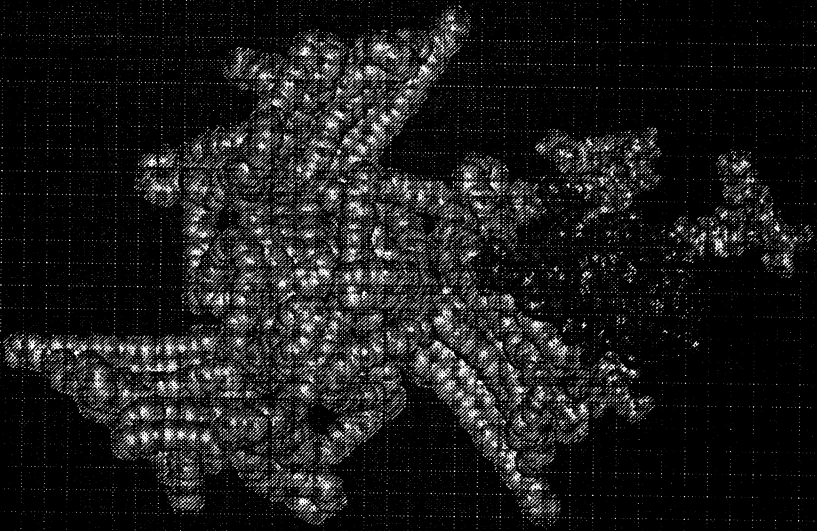
Methoxy polyethyleneglycole-succinimidyl butanoic acid



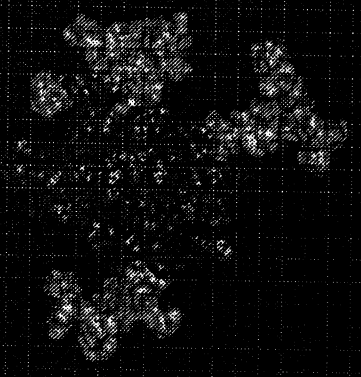
Mono-30kD-PEG-SBA-EPO

Molecular Structure

3D structure models



CERA



EPO