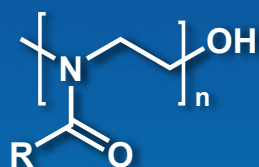


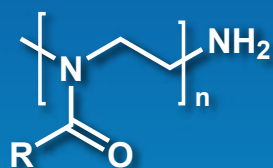
Water-solubility Enhancing Agents Superior to PEGs



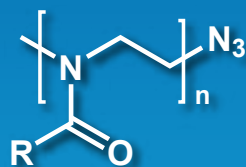
R = CH₃ ULTROXA® Poly(2-methyl-2-oxazoline) (n=approx. 100)
200mg [P2506]

R = CH₂CH₃ ULTROXA® Poly(2-ethyl-2-oxazoline) (n=approx. 100)
500mg [P2507]

R = (CH₂)₂CH₃ ULTROXA® Poly(2-propyl-2-oxazoline) (n=approx. 100)
200mg [P2508]



R = CH₃ ULTROXA® Poly(2-methyl-2-oxazoline) Amine Terminated
(n=approx. 50) 100mg [U0135]



R = CH₃ ULTROXA® Poly(2-methyl-2-oxazoline) Azide Terminated
(n=approx. 50) 100mg / 500mg [U0134]

R = CH₂CH₃ ULTROXA® Poly(2-ethyl-2-oxazoline) Azide Terminated
(n=approx. 50) 100mg / 500mg [U0132]

Advantages

- Biocompatible and non-immunogenic pseudo-polypeptide structure.
- P2506, U0135, U0134 are more hydrophilic than poly(ethylene glycol) (PEG).
- Can be conjugated to a target molecule using a method suitable for each terminal functional group (OH, NH₂, N₃).
- P2507 or P2508 transition to a hydrophobic state in water when heated. (Low Critical Solution Temperature (LCST):
P2507 ca. 65°C, P2508 ca. 25°C)

Applications

Surface Coating with Protein-repellent or Nonfouling Properties

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Drug Delivery Systems

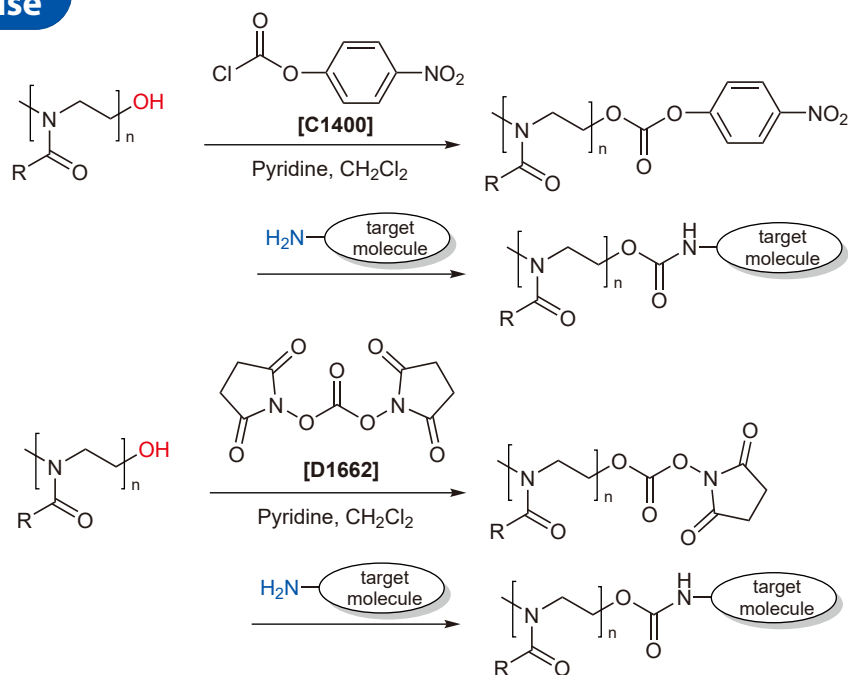
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Thermoresponsive Material

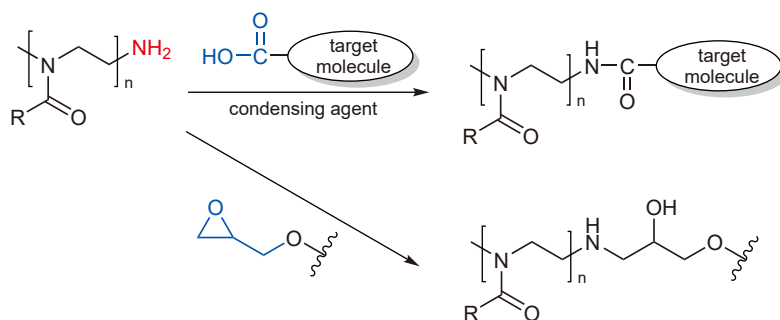
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Water-solubility Enhancing Agents Superior to PEGs

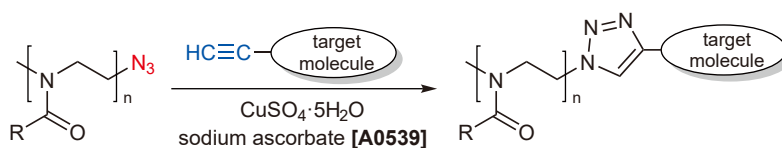
Examples of use



Reference T. X. Viegas, M. D. Bentley, J. M. Harris, Z. Fang, K. Yoon, B. Dizman, R. Weimer, A. Mero, G. Pasut, F. M. Veronese, *Bioconjugate Chem.* **2011**, 22, 976.



Reference L. Tauhardt, M. Frant, D. Pretzel, M. Hartlieb, C. Bücher, G. Hildebrand, B. Schröter, C. Weber, K. Kempe, M. Gottschaldt, K. Liefelth, U. S. Schubert, *J. Mater. Chem. B.* **2014**, 2, 4883.



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