

Product Data Sheet

Product Name: transferrin fragment

Cat. No.: GP10064

Chemical Properties

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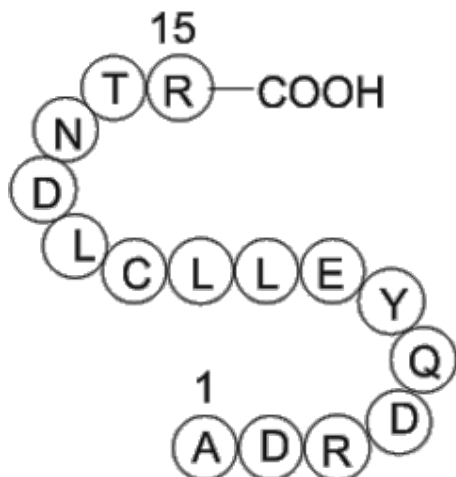
Formula $C_{75}H_{121}N_{23}O_{28}S$ M.Wt 1824.97

Solubility $\geq 182.4\text{mg/mL}$ in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Transferrin is the principal iron-binding protein in animal serum and is analogous in its iron-binding site and properties to lactoferrin¹. Human transferrin is a single-chain glycoprotein of molecular weight near 80,000. The molecule is arranged in two lobes, each bearing a single metal-binding site.

Caution: Product has not been fully validated for medical applications. For research use only.

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Although similar in ligand structure^{2, 3}, the sites are distinguishable in many of their properties^{4, 5}. Sequence homology between the lobes⁶ and internal homology in organization of the transferrin gene⁷ establish that the modern protein arose by duplication and fusion of a primitive gene specifying a single-sited transferrin precursor protein.

Each lobe of the transferrin molecule contains a recognition site for the chick receptor, and that both lobes are required for binding to receptor⁸. The receptor-binding activity of human transferrin is essentially confined to the C-terminal lobe and is preserved in the C-fragment even in the absence of the N-fragment.

References:

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