

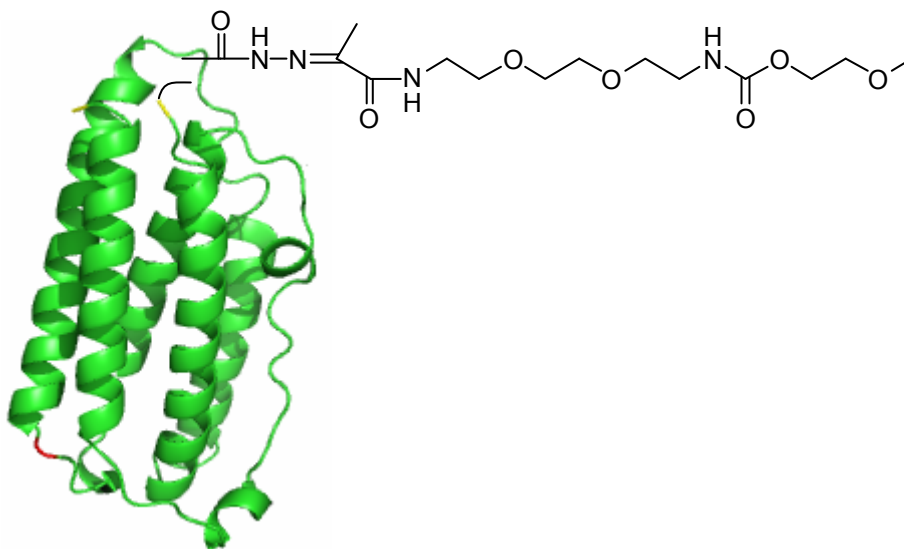


### Example 2: Interferon beta 1 b

Interferon beta 1b (IFN $\beta$ 1b) is available in the clinic in its native form as betaseron  $\text{\textcircled{R}}$  as a treatment for hepatitis. Issues inherent to the endogenous nature of betaseron  $\text{\textcircled{R}}$  include rapid clearance from blood, frequent administration required (injection site necrosis), and physical & chemical instability. PEGylation has the potential to circumvent these issues but has never been achieved in a commercial product for IFN $\beta$ 1b.

Using the Almac proprietary ligation technology we have introduced C - terminal specific PEG and maintained biological activity:

**Figure 1:** C-terminal PEGylated IFN $\beta$ 1b



**Figure 2:** Antiviral activity of PEGylated IFN $\beta$ 1b is comparable with native IFN $\beta$ 1b.

