Example 2: Interferon beta 1 b

Interferon beta 1b (IFNβ1b) is available in the clinic in its native form as betaseron® as a treatment for hepatitis. Issues inherent to the endogenous nature of betaseron® 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 IFNβ.

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

Figure 1: C-terminal PEGylated IFNβ1b

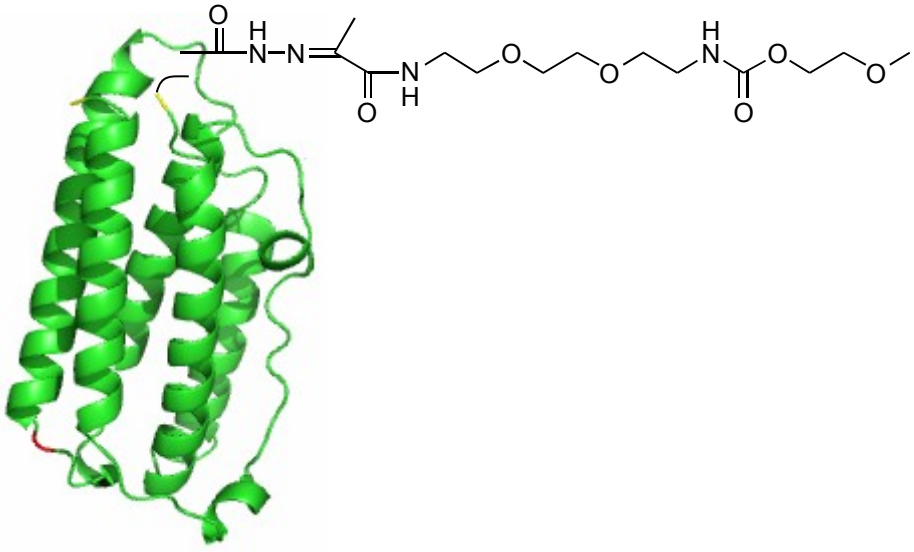
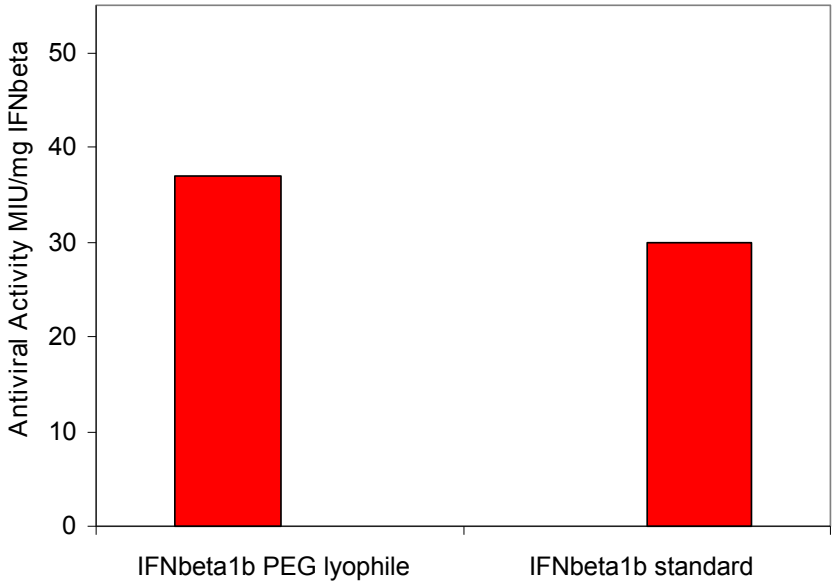
Figure 2: Antiviral activity of PEGylated IFNβ1b is comparable with native IFNβ1b.