

**CERTIFICATE OF ANALYSIS**

**GENERAL INFORMATION**

**Product No.:** PE631010

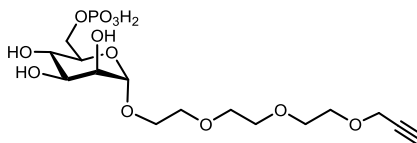
**CAS No.:** N/A

**Product Name:**  $\alpha$ -Man-6-phosphate-PEG3-Alkyne

**Other Names:**  $\alpha$ -M6P-PEG3-Propyne; (Dodec-11-yn-3,6,9-trioxadodecyl)  $\alpha$ -D-mannose-6-phosphate; 2-{2-[2-(Prop-2-ynyloxy)ethoxy]ethoxy}ethyl mannose-6-phosphate

**Description:** Mannose-6-phosphate (M6P) glycan is a crucial signal for the trafficking of lysosomal enzymes to lysosomes and is recognized by M6P receptors (MPRs). The resulting enzyme-MPR complex is delivered to early endosomes. Development of therapeutic enzymes for lysosomal storage diseases require M6P glycans for cellular uptake and lysosomal targeting.

**Structure:**



**Formula:** C<sub>15</sub>H<sub>27</sub>O<sub>12</sub>P

**Mol. Wt.:** 430.34

**Exact Mass:** 430.12

**CHARACTERIZATION**

PROPERTY	OBSERVATION
<b>Appearance &amp; Physical State:</b>	Off-white gum
<b>Proton NMR (D<sub>2</sub>O, 400 MHz):</b>	Conforms
<b>Mass Spectrometry (ESI-POS):</b>	Conforms, [M+H] <sup>+</sup> = 431.3 [M+NH <sub>4</sub> ] <sup>+</sup> = 448.3
<b>Purity (&gt;95% by HPLC):</b>	N/A

**BATCH INFORMATION**

**Lot No.:** XXXXXX

**Date Prepared:** XXXXXX

**NOTES**

1. Store long-term under inert gas at -20 ± 5°C.
2. Keep dry. Allow container and contents to warm to room temperature before opening.
3. Monodisperse PEG unit.