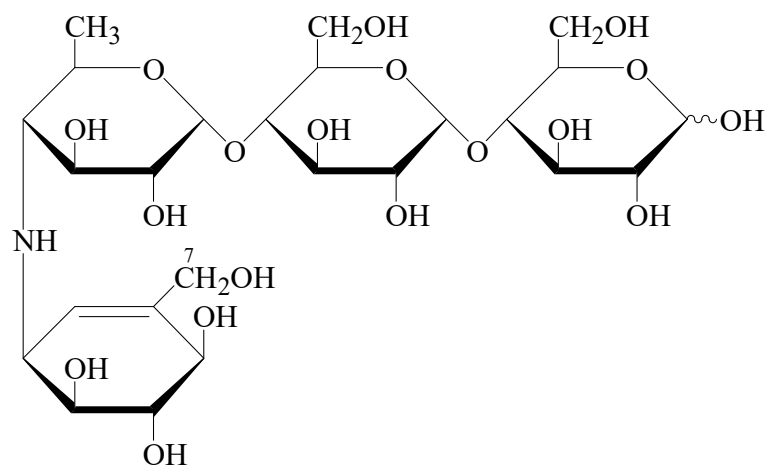




>>Entry Name: Acarbose, BAN, INN, USAN

**Synonym(s):** 4,6-Dideoxy-4-[[4,5,6-trihydroxy-3-(hydroxymethyl)-2-cyclohexen-1-yl]amino]- $\alpha$ -D-glucopyranosyl-(1 $\rightarrow$ 4)- $\alpha$ -D-glucopyranosyl-(1 $\rightarrow$ 4)-D-glucose, 9Cl. Amylostatin J. Glucobay. Bay g 5421.  $\alpha$ -GHI. Precose. Prandase



**CAS Registry Number:** 56180-94-0

**Extra CAS Registry Numbers(s):** 82642-63-5

**Molecular Formula:** C<sub>25</sub>H<sub>43</sub>NO<sub>18</sub>

**Molecular Weight:** 645.611

**Accurate Mass:** 645.248019

**Percentage Composition:** C 46.51%; H 6.71%; N 2.17%; O 44.61%

**General Statement:** A component of the Amylostatin complex. See also Amylostatin [CKT20-I](#)

**Biological Source:** Isol. from *Actinoplanes* sp.

**Biological Use/Importance:** A potent inhibitor of  $\alpha$ -glucosidases and saccharases. Used for treatment of diabetes, hyperlipidaemia and obesity

**Physical Description:** Amorph.

**Development Status:** Launched in 1990

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub> +147.2 (H<sub>2</sub>O). [ $\alpha$ ]<sub>D</sub><sup>20</sup> +171.3

**Solubility:** BERDY SOL: Sol. H<sub>2</sub>O; fairly sol. MeOH; poorly sol. EtOH, hexane

>>Derivative: 7-O-Phosphate

**Molecular Formula:** C<sub>25</sub>H<sub>43</sub>NO<sub>21</sub>P

**Molecular Weight:** 724.583

**Accurate Mass:** 724.206526

**Percentage Composition:** C 41.44%; H 5.98%; N 1.93%; O 46.37%; P 4.27%

**Biological Source:** From *Actinoplanes* sp.

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