

## **Product Datasheet**

## Heneicosapentaenoic Acid methyl ester (orb2283753)

**Description** Heneicosapentaenoic Acid (HPA) is a fatty acid found in small amounts in

Bryopsis pennata Lamouroux green algae and fish oils, with a structure similar to eicosapentaenoic acid (EPA), but with an additional carbon at the carboxyl end, resulting in the first double bond being in the  $\Delta 6$  position. HPA is important for researching the impact of double bond positions in n-3 fatty acids, as it integrates into phospholipids and triacylglycerol in vivo as effectively as EPA and docosahexaenoic acid (DHA), while strongly inhibiting the synthesis of arachidonic acid from linoleic acid. Despite being a poor substrate for prostaglandin H (PGH) synthase and 5-lipoxygenase, HPA can rapidly deactivate PGH synthase. HPA methyl ester, in certain formulations, acts as a prodrug to enhance cellular uptake of HPA before being converted into free acid by

esterases, and serves as a useful reference standard.

Storage -20°C

**Note** For research use only

Formula  $C_{22}H_{34}O_2$ 

**Purity** 98.00%

**MW** 330.5

**CAS Number** 65919-53-1

**Expiration Date** 12 months from date of receipt.