COMPOUND DETAILS NNC0103-0147

Long-acting GLP-2 analogue

NOVO NORDISK COMPOUND SHARING

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Content

Long-acting GLP-2 analogue

Glucagon-like peptide-2 (GLP-2) is a 33 amino acid peptide that is co-secreted with GLP-1 from the human intestine upon food intake. GLP-2 stimulates intestinal growth and has therapeutic relevance for treatment of inflammatory bowel diseases and short bowel syndrome.

NNC0103-0147 is a protracted GLP-2 analogue that has been characterised for its ability to cross membranes. We have limited data on this specific compound, see the Trier *et al*. 2014 reference listed in the reference section.

Category	GLP-2
ID	NNC0103-0147
Amount pr. vial	1000 nmol

Calculated properties

Property	NNC0103-0147	GLP-2 (1-33)-OH
MW (Da)	4132.7	3766.1
pI (calculated)	4.3	4.3
Sequence substitutions (compared to reference)	Glu3, Lys17 (betaAla-C16), Arg30	
Extinction coefficient (calculated, 280 nm)	5500	5500

Structural information

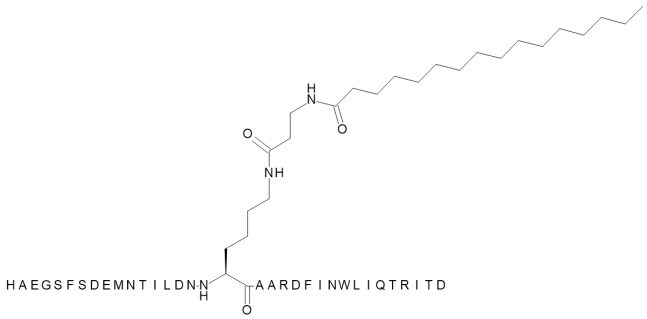

Figure 1

HADGSFSDEMNTILDNLAARDFINWLIQTKITD

Figure 2

Figure 1

2D sketch of the structure of NNC0103-0147. Compared to native GLP-2, NNC0103-0147 has a glutamic acid in position 3, a betaAla-C16 attached to the lysine at position 17 and an arginine in position 30

Figure 2

2D sketch of the sequence of native GLP-2 (1-33)-OH.

In vitro data

The;*in vitro* data of NNC0103-0147 are similar to those of native GLP-2 in the limited potency assays it has been tested in. See the Trier *et al*. 2014 reference listed in the reference section.

Reference Compound

The reference compound to NNC0103-0147 is native GLP-2 (1-33)-OH (NNC0103-0100). Please indicate (with a check mark at 'Please add the reference compound if available) during your compound request if you would like to have native GLP-2 (NNC0103-0100) included in your shipment.

Compound handling instructions

The GLP-2 peptides can be dissolved in DMSO and should be stored at 5C. Long term stability studies have not been performed for this analogue. The compound should also be soluble in neutral buffer but this has not been in depth investigated. Peptides and proteins have a tendency to adhere to glass and plastic surfaces. This may at low concentration impact the actual amount in solution. To minimize this unspecific adherence, adding detergents or inert proteins like e.g., ovalbumin or other serum albumins to the solution can minimize this phenomenon. In case albumins are added to peptide/protein solutions, ensure that the albumins are free of any proteases, but be aware that it will affect the apparent potency and affinity in in vitro assays in case a fatty acid is attached to the compound.

References

1. Trier S et al.
Acylation of glucagon-like peptide-2: Interaction with lipid membranes and in vitro intestinal permeability

PLoS One. 2014; 9(10): e109939