

# STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL

USAN (GH-23)

EFINOPEGDUTIDE

PRONUNCIATION

ef'' in oh peg doo' tide

THERAPEUTIC CLAIM

Treatment of obesity and the complications of obesity

CHEMICAL NAMES

1. Poly(oxy-1,2-ethanediyl),  $\alpha$ -hydro- $\omega$ -hydroxy-,  $\alpha^{30}$ -ether with -L-histidyl-2-methylalanyl-L-glutaminyglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L- $\alpha$ -aspartyl-L-tyrosyl-L-seryl-L-lysyl-L-tyrosyl-L-leucyl-L- $\alpha$ -aspartyl-L- $\alpha$ -glutamyl-L-lysyl-L-arginyl-L-alanyl-L-lysyl-L- $\alpha$ -glutamyl-L-phenylalanyl-L-valyl-L-glutaminy-L-tryptophyl-L-leucyl-L-methionyl-L-asparaginy-L-threonyl-S-[1-[3-[(3-hydroxypropyl)amino]-3-oxopropyl]-2,5-dioxo-3-pyrrolidinyl]-L-cysteinamide (16 $\rightarrow$ 20)-lactam,  $\omega^1$ -ether with immunoglobulin G4 [1-[1-(3-hydroxypropyl)proline]](human Fc fragment), (3 $\rightarrow$ 3')-disulfide with immunoglobulin G4 (human Fc fragment)
2. Oxyntomodulin analogue, conjugated by a 10kDa polyethylene glycol (PEG) linker ( $n \sim 225$ ) to an Fc portion dimer of human immunoglobulin G4 (IgG4):  $N^{1,9}$ -(3-{ $\omega$ -[3-(3-{(3RS)-3-[(16'',20''-anhydro-[S<sup>2''>B, S<sup>16''>E, R<sup>17''>K, Q<sup>20''>K, D<sup>21''>E, K<sup>30''>C</sup>]-human oxyntomodulin (1''-30'')-peptidamide)-S<sup>3,30''</sup>-yl]-2,5-dioxopyrrolidin-1-yl}propanamido)propoxy}polyoxyethylene}propyl)[human immunoglobulin G4 Fc fragment-(9-229,9'-229')-dipeptide (11-11') disulfide; produced in *Escherishia coli*.</sup></sup></sup></sup></sup>

## STRUCTURAL FORMULA


IgG4 Fc fragment 9-229, monomer

<u>PS</u>	CPAPEFLGGP	SVFLFPPKPK	DTLMISRTPE	VTCVVVDVDSQ	50
EDPEVQFNWY	VDGVEVHNAK	TKPREEQFNS	TYRVVSVLTV	LHQDWLNGKE	100
YKCKVSNKGL	PSSIEKTISK	AKGQPREPQV	YTLPPSQEEM	TKNQVSLTCL	150
VKGFYPSDIA	VEWESNGQPE	NNYKTTPPVL	DSDGSFFLYS	RLTVDKSRWQ	200
EGNVFSCSVM	HEALHNHYTQ	KSLSLSLGK			229

Disulfide bridges location

11-11' 43-103 43'-103' 149-207 149'-207'

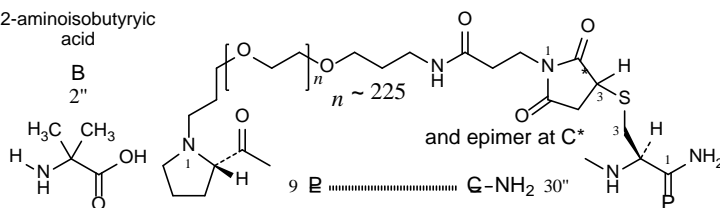
Conjugated peptide oxyntomodulin analogue

1'' HBQGTFTSDY SKYLDEKRAK EFVQWLMNTQ-NH<sub>2</sub> 30''  

  
cyclic amide

Modified residues

2-aminoisobutyric acid

B  
2''



Glycosylation sites (none)

MOLECULAR FORMULA	$C_{2400}H_{3687}N_{629}O_{735}S_{18} \cdot (C_2H_4O)_n$
MOLECULAR WEIGHT	63.60 kDa
TRADEMARK	None as yet
SPONSOR	Janssen Research & Development
CODE DESIGNATIONS	JNJ-64565111, HM12525A
<u>CAS</u> REGISTRY NUMBER	2055640-93-0
UNII	DR6P1M58PO
WHO NUMBER	10793

gbk