

STATEMENT ON A NONPROPRIETARY NAME ADOPTED BY THE USAN COUNCIL:

USAN	PEGAPTANIB SODIUM
PRONUNCIATION	peg ap' ta nib
THERAPEUTIC CLAIM	treatment of age-related macular degeneration disease (anti-VEGF apatamer)

CHEMICAL NAMES

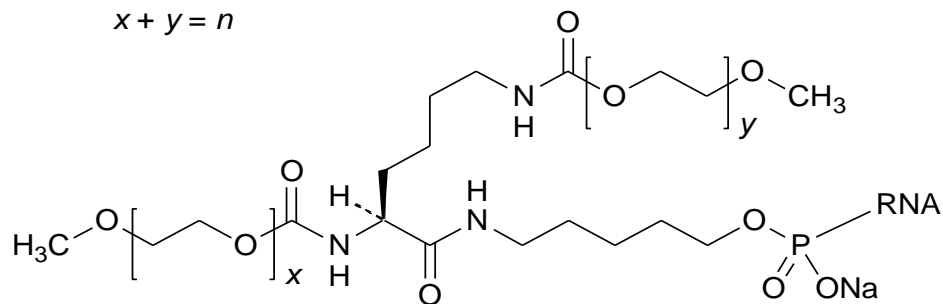
- (1) RNA, ((2'-deoxy-2'-fluoro)C-G<sub>m</sub>-G<sub>m</sub>-A-A-(2'-deoxy-2'-fluoro)U-(2'-deoxy-2'-fluoro)C-A<sub>m</sub>-G<sub>m</sub>-(2'-deoxy-2'-fluoro)U-G<sub>m</sub>-A<sub>m</sub>-A<sub>m</sub>-(2'-deoxy-2'-fluoro)U-G<sub>m</sub>-(2'-deoxy-2'-fluoro)C-(2'-deoxy-2'-fluoro)U-(2'-deoxy-2'-fluoro)U-A<sub>m</sub>-(2'-deoxy-2'-fluoro)U-A<sub>m</sub>-(2'-deoxy-2'-fluoro)C-A<sub>m</sub>-(2'-deoxy-2'-fluoro)U-(2'-deoxy-2'-fluoro)C-(2'-deoxy-2'-fluoro)C-G<sub>m</sub>-(3'→3')-dT), 5'-ester with  $\alpha,\alpha'$ -[4,12-dioxo-6-[[[5-(phosphonoxy)pentyl]amino]carbonyl]-3,13-dioxo-5,11-diaza-1,15-pentadecanediy]]bis[ $\omega$ -methoxypoly(oxy-1,2-ethanediyl)], sodium salt
- (2) 5'-ester of (2'-deoxy-2'-fluoro)C-G<sub>m</sub>-G<sub>m</sub>-A-A-(2'-deoxy-2'-fluoro)U-(2'-deoxy-2'-fluoro)C-A<sub>m</sub>-G<sub>m</sub>-(2'-deoxy-2'-fluoro)U-G<sub>m</sub>-A<sub>m</sub>-A<sub>m</sub>-(2'-deoxy-2'-fluoro)U-G<sub>m</sub>-(2'-deoxy-2'-fluoro)C-(2'-deoxy-2'-fluoro)U-(2'-deoxy-2'-fluoro)U-A<sub>m</sub>-(2'-deoxy-2'-fluoro)U-A<sub>m</sub>-(2'-deoxy-2'-fluoro)C-A<sub>m</sub>-(2'-deoxy-2'-fluoro)U-(2'-deoxy-2'-fluoro)C-(2'-deoxy-2'-fluoro)C-G<sub>m</sub>-(3'→3')-dT with  $\alpha,\alpha'$ -[[[(1S)-1-[[5-(phosphonoxy)pentyl]carbonyl]pentane-1,5-diy]]bis(iminocarbonyl)]bis[ $\omega$ -methoxypoly(oxyethane-1,2-diy)] sodium salt

STRUCTURAL FORMULA

(See Page 2)

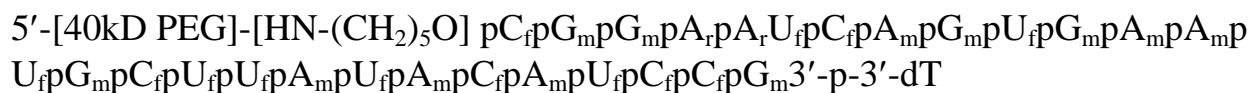
MOLECULAR FORMULA	C <sub>294</sub> H <sub>342</sub> F <sub>13</sub> N <sub>107</sub> Na <sub>28</sub> O <sub>188</sub> P <sub>28</sub> [C <sub>2</sub> H <sub>4</sub> O] <sub>n</sub>
MOLECULAR WEIGHT	Approximately 50 Kilodaltons
TRADEMARK	Unknown as yet
MANUFACTURER	Eyetech Pharmaceuticals, Inc.
CODE DESIGNATIONS	EYE001; NX1838
<u>CAS</u> REGISTRY NUMBER	222716-86-1

STRUCTURE:



AMINO ACID SEQUENCE:

The poly(ethylene glycol)(PEG)-conjugated oligonucleotide has the following sequence of nucleotides and functional groups:



where:

- [40 kd PEG] represents two 20 kildalton-poly(ethylene glycol) polymer chains that are covalently attached via the two amine groups on a lysine residue via carbamate linkages. This moiety is in turn linked to the oligonucleotide via the amino linker described below.
- [HN-(CH<sub>2</sub>)<sub>5</sub>O-] represents the bifunctional amino linker that covalently links to the poly(ethylene glycol)(PEG) polymer via an amide bond. The linker is attached to the oligonucleotide via a phosphodiester bond.
- p represents the phosphodiester functional groups that link sequential nucleosides and that link the amino linker to the oligonucleotide. All of the phosphodiester groups are negatively charged at neutral pH and have a sodium atom as the counter ion.
- G<sub>m</sub> or A<sub>m</sub> and C<sub>f</sub> or U<sub>f</sub> and A<sub>r</sub> represent 2'-methoxy, 2'-fluoro and 2'-hydroxy variations of their respective purines and pyrimidines.
- C,A,U, and G are the single letter codes for cytidylic, adenylic, uridylic, and guanylic acids.