AOD 9604
Research Applications

US Peptide Co

Mechanism of Action

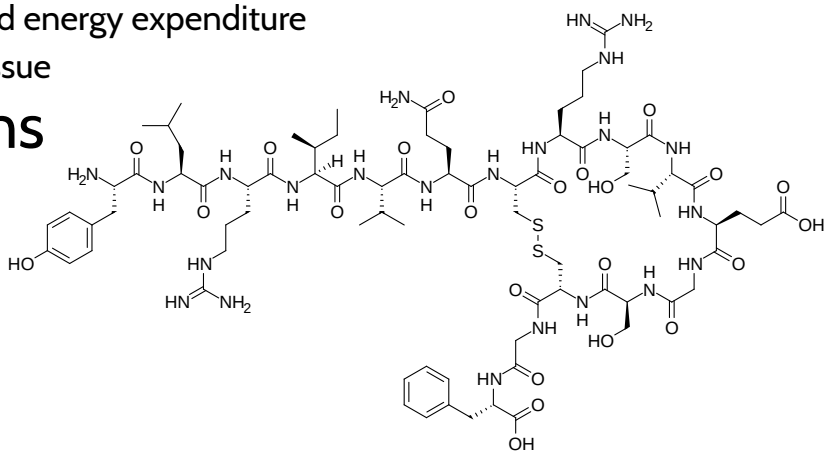
AOD 9604 is a modified fragment of the human growth hormone (hGH), specifically amino acids 177-191. In research models, it has demonstrated interaction with fat cells through mechanisms distinct from the full hGH molecule. Studies suggest it may influence cellular pathways involved in lipolysis without affecting glucose metabolism or growth, making it valuable for targeted metabolic research.

Research Applications

- Lipolytic pathway research and adipocyte metabolism studies
- Investigation of cellular mechanisms regulating fat metabolism
- Models examining metabolic regulation and energy expenditure
- Research on cellular signaling in adipose tissue

Laboratory Considerations

- Store lyophilized powder at -20°C
- Once reconstituted, store at 4°C
- Avoid repeated freeze-thaw cycles



Molecular Profile

- Chemical Formula: $C_{140}H_{224}N_{40}O_{40}$
- Molecular Weight: 3,126.5 Da
- Sequence: Tyr-Leu-Arg-Ile-Val-Gln-Cys-Arg-Ser-Val-Glu-Gly-Ser-Cys-Gly-Phe

References

1. Ng FM, et al. Metabolic effects of AOD9604 on adipose tissue. Drug Dev Res. 2000;51(4):260-263.
2. Heffernan M, et al. The effects of human GH and its lipolytic fragment (AOD9604) on lipid metabolism following chronic treatment in obese mice and β_3-AR knock-out mice. Endocrinology. 2001;142(12):5182-5189.
3. Stier H, et al. Safety of AOD9604 for human consumption. Regul Toxicol Pharmacol. 2007;48(3):259-270.
4. Schamberger BM, et al. AOD9604 enhances mesenchymal stem cell chondrogenesis and cartilage repair. Osteoarthritis Cartilage. 2015;23:A82-A416.