

# PRODUCT INFORMATION



## [Des-His<sup>1</sup>,Glu<sup>9</sup>]-Glucagon (1-29) amide (trifluoroacetate salt)

Item No. 24459

|                     |   |   |
|---------------------|---|---|
| <b>MF:</b>          | C <sub>148</sub> H <sub>221</sub> N <sub>41</sub> O <sub>47</sub> S • XCF <sub>3</sub> COOH | H—Ser—Gln—Gly—Thr—Phe—Thr—Ser—Glu—Tyr—Ser—      |
| <b>FW:</b>          | 3,358.7   | Lys—Tyr—Leu—Asp—Ser—Arg—Arg—Ala—Gln—Asp—        |
| <b>Purity:</b>      | ≥95%  | Phe—Val—Gln—Trp—Leu—Met—Asn—Thr—NH <sub>2</sub> |
| <b>Supplied as:</b> | A lyophilized powder  | • XCF <sub>3</sub> COOH                         |
| <b>Storage:</b>     | -20°C   |   |
| <b>Stability:</b>   | ≥4 years  |   |

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

[Des-His<sup>1</sup>,Glu<sup>9</sup>]-Glucagon (1-29) amide (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the [Des-His<sup>1</sup>,Glu<sup>9</sup>]-glucagon (1-29) amide (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. [Des-His<sup>1</sup>,Glu<sup>9</sup>]-Glucagon (1-29) amide (trifluoroacetate salt) is soluble in the organic solvent formic acid, at a concentration of approximately 1 mg/ml.

### Description

[Des-His<sup>1</sup>,Glu<sup>9</sup>]-Glucagon (1-29) amide is a peptide glucagon receptor antagonist (pA<sub>2</sub> = 7.25 for glucagon binding to isolated rat liver membranes).<sup>1</sup> It binds to glucagon receptors in a magnesium- and GTP-independent manner to stimulate breakdown of inositol phospholipids by phospholipase C, but has no effect on adenylate cyclase activity, in hepatocytes.<sup>1,2</sup> *In vivo*, [Des-His<sup>1</sup>,Glu<sup>9</sup>]-glucagon (1-29) amide prevents glucagon-induced hyperglycemia in rabbits and decreases blood glucose in rats with diabetes induced by streptozotocin (Item No. 13104).<sup>1</sup>

### References

1. Unson, C.G., Gurzenda, E.M., and Merrifield, R.B. Biological activities of des-His<sup>1</sup>[Glu<sup>9</sup>]glucagon amide, a glucagon antagonist. *Peptides* **10(6)**, 1171-1177 (1989).
2. Post, S.R., Rubinstein, P.G., and Tager, H.S. Mechanism of action of des-His<sup>1</sup>-[Glu<sup>9</sup>]glucagon amide, a peptide antagonist of the glucagon receptor system. *Proc. Natl. Acad. Sci. U.S.A.* **90(5)**, 1662-1666 (1993).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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